

# AMERICAN PSYCHOLOGIST

VOLUME 16



NUMBER 9

*September 1961*

*Published Monthly by*

THE AMERICAN PSYCHOLOGICAL ASSOCIATION, INC.

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# AMERICAN PSYCHOLOGIST

Journal of the American Psychological Association, Inc.

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Volume 16

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**Psychological Review.** Editor: RICHARD L. SOLOMON, University of Pennsylvania. Original contributions of a theoretical nature. Bimonthly. Subscription: \$10.00 (Foreign \$10.50). Single copies, \$2.00.

PROCEEDINGS OF THE FORTY-FIRST ANNUAL MEETING  
OF THE  
WESTERN PSYCHOLOGICAL ASSOCIATION

THOMAS W. HARRELL, Secretary-Treasurer

*Stanford University*

THE forty-first Annual Meeting of the Western Psychological Association was held in Seattle, Washington, June 15-17, 1961. Approximately 600 persons registered for the convention. The program included 138 papers, 14 symposia, 6 invited addresses, and the Western Psychological Invitational Address by William K. Estes on "The Human Observer and the Computer as Diagnostic Instruments."

The Presidential Address, "Divide and Conquer," was delivered by David Krech.

The Convention Manager was George P. Horton. Irwin G. Sarason was Chairman of the Program Committee, and Ezra Stotland was Chairman of the Local Arrangements Committee.

At the Business Meeting it was announced that there would, in the future, be a second Western Psychological Association Invitational Address. In addition to an

address by a distinguished psychologist, the second address would be by someone in a related field on a scientific topic. The speakers will be chosen by the President upon the advice of the Executive Committee.

John P. Seward was elected President-elect for the coming year.

The President for 1961-1962 is F. Theodore Perkins.

The 1962 convention site is San Francisco, California, with Herbert Naboisek acting as Convention Chairman. The 1963 convention will be in Santa Monica. The American Association for the Advancement of Science has invited the Western Psychological Association to meet with it in December 1965 on the Pacific coast. The meeting will probably be in the San Francisco area or in Los Angeles. The Western Psychological Association is interested and will decide after finding out the exact location.

PROGRAM

PAPER SESSIONS

Learning I

HARRY A. SHOEMAKER, *University of Oregon*, Chairman

Multiple object discrimination learning in the monkey. NISSIM LEVY, *University of Portland*.

Performance in a shock-avoidance conditioning situation interpreted as pseudoconditioning. E. M. TAYLOR, C. M. DAVIS, T. B. COLLINS, AND O. A. SMITH, *University of Washington*.

The partial reinforcement effect sustained through blocks of continuously reinforced trials. JOHN THEIOS, *Stanford University*.

Stimulus alternation in a multiple-choice situation. MERRELL E. THOMPSON, *New Mexico State University*.

The effect of irrelevant information on a complex auditory discrimination task. WILLIAM E. MONTAGUE, *United States Navy Electronics Laboratory, San Diego, California*.

Educational I

MAURICE F. FREEHILL, *Western Washington College of Education*, Chairman

A comparison of MMPI scale correlations of gifted college students and their peers. LOIS LANGLAND, *University of California*.

Differing perceptions of the college environment by freshmen and by juniors. LESLIE H. SQUIER AND CAROL F. CREEDON, *Reed College*.

The kinesthetic method in remedial reading. WILLIAM OFMAN AND MORTON SHAEVITZ, *University of California, Los Angeles*.

The validity of a battery of tests in communication skills for foreign students attending an American university. ROBERT A. JONES AND WILLIAM B. MICHAEL, *University of Southern California*.

Clinical I

LEONARD KRASNER, *VA Hospital, Palo Alto, California*, Chairman

A factorial study of clinical assessment and prediction. MAURICE KORMAN, *University of Texas Southwestern Medical School*.

The relationship of clinical experience and training methods to several criteria of clinical prediction. STUART OSKAMP, *Stanford University*.

The relevance of behavioral statements in the judgments made by clinicians, corpsman, and line superiors. ALLEN E. MCMICHAEL, *United States Navy Medical Neuropsychiatric Research Unit, San Diego, California*.

The conscious control of Rorschach responses. MURIEL D. LEZAK, *University of Portland*.

The retention and generalization of operant conditioning effects in a free interview situation. RUDOLF H. MOOS, *University of California School of Medicine*.  
 Vocal behavior: An illustrative case study. WILLIAM A. HARGREAVES AND JOHN A. STARKWEATHER, *Langley Porter Neuropsychiatric Institute and University of California School of Medicine*.

### Social I

BERTRAM H. RAVEN, *University of California, Los Angeles*, Chairman

Stereotypes and components of accuracy of interpersonal perception scores. JAMES M. RICHARDS, JR., VICTOR B. CLINE, AND MAX W. RARDIN, *University of Utah*.  
 Definition of the situation and ascribed similarity as determinants of interpersonal choice. M. J. LERNER, *VA Office, Palo Alto, California*.  
 A study of perceptual sets. IRWIN MAHLER, *Occidental College*.  
 Nominating conventions and the perception of political figures. PHILIP S. GALLO AND BERTRAM H. RAVEN, *University of California, Los Angeles*.  
 Studies in prejudice and the perception of ethnic group members: II. Attractiveness, response bias, and antisemitism. MARTIN FISHBEIN, SAMUEL HIMMELFARB, AND WALDA FEDER, *University of California, Los Angeles*.  
 The effects of attributed ability upon expert and referent influence. HELGE H. MANSSON, BERTRAM H. RAVEN, AND EDWIN ANTHONY, *University of California, Los Angeles*.

### Human Physiological

MONCRIEFF H. SMITH, JR., *University of Washington*, Chairman

Autonomic lability and perceptual and motor performance. RICHARD F. DOCTOR, JACQUES W. KASWAN, AND CHARLES Y. NAKAMURA, *University of California, Los Angeles*.  
 Effect of emotional state on hand and kidney circulation. JOHN P. MEEHAN, ALFRED JACOBS, AND LUBOR CAPEK, *University of Southern California*.  
 Magnitude of GSR as a function of CS-UCS interval. ANSHO UCHIMA, *University of Southern California*.  
 Effect of instructions and differential set development on extinction of the GSR. RUSSELL A. LOCKHART, WILLIAM W. GRINGS, AND SIDNEY CARLIN, *University of Southern California*.  
 Semantic and mediated generalization in autonomic conditioning. SIDNEY CARLIN, WILLIAM W. GRINGS, AND ALFRED JACOBS, *University of Southern California*.

### Experimental I

JOHN P. SEWARD, *University of California, Los Angeles*, Chairman

Context effects in magnitude estimation. F. NOWELL JONES AND DAVID SINGER, *University of California, Los Angeles*.  
 Esthetic judgment of a random total sequence as a function of training. HARRY A. SHOEMAKER, *University of Oregon*.  
 Meaning as a reinforcing stimulus. HARRY MUNSINGER, *University of Oregon*.  
 A comparison of concentration and duration as measures of threshold for eye irritation. MARGARET HUBBARD JONES, HARRY BUCHBERG, KENNETH G. LINDH, AND KATHERINE W. WILSON, *University of California, Los Angeles*.  
 Associative originality in normals and schizophrenics. IRVING MALTZMAN, SEYMORE SIMON, AND WILLIAM WATTS, *University of California, Los Angeles*.  
 The effects of number of repetitions on word association originality training and unusual uses. SEYMORE SIMON, *University of California, Los Angeles*.

### Social II

LOUIS GAFFNEY, *Seattle University*, Chairman

The use of instructorless small groups in a social psychology course. LESLIE R. BEACH, *Whitworth College*.  
 A cross-cultural study of academic achievement. ROBERT FRAGER, *Reed College*.  
 A comparison of semantic profiles in Chinese and English. YUNG-HUO LIU, *Seattle Pacific College*.  
 A technique for studying attitude change. DONALD B. MURPHY AND GEORGE L. HAMPTON, *HumRRO, Monterey, California*.

### Applied Psychology and Human Engineering I

ROBERT F. MAGER, *Varian Associates, Palo Alto, California*, Chairman

A system approach to the development of qualitative personnel requirements information. EDWARD B. SLEBODNICK, *Boeing Airplane Company*.  
 A proposed method of evaluating the efficiency of man-machine systems. DAVID MEISTER, *General Dynamics Corporation, San Diego, California*.  
 Use of logic symbols for task analysis. A. H. URMER, P. N. NEY, AND E. C. WORTZ, *Martin Company, Denver, Colorado*.  
 Simulation on an IBM 7090 of the dynamics of the operation of a new Air Force missile system, to optimize Air Force personnel requirements. C. R. TURNER, *Boeing Airplane Company*.



Quantity of information output as a function of the roles of humans in a decision making context. ANGELO J. MICOCCHI, *Dunlap and Associates*.

The influence of map density and character orientation on pilot's readout capabilities. NICHOLAS A. BOND, JR. AND ANGELO J. MICOCCHI, *Dunlap and Associates*.

### Educational II

LLOYD LOVELL, *University of Oregon*, Chairman

Personality-trait and measured-interest differences between students in engineering and the physical sciences. HAROLD A. KORN, *Stanford University*.

Intrinsic programming: A simulation technique. JOSEPH A. TUCKER, JR., *University of California, Santa Barbara*.

An evaluation of teaching machines and programmed text books. ARNOLD ROE, *University of California, Los Angeles*.

Sensory interrelationships in the automated teaching of languages. JAMES J. ASHER, *San Jose State College*.

### Perception

ALLEN PARDUCCI, *University of California, Los Angeles*, Chairman

A specification of Gibson's gradient theory of spatial vision. PAUL B. PORTER, *University of Utah*.

Greyout and spectral sensitivity to different colored test lights during positive acceleration. PAUL TOBIAS AND J. P. MEEHAN, *University of Southern California*.

The moon illusion as an event in imaginary space. HOWARD E. GRUBER, WILLIAM KING, AND STEPHEN LINK, *University of Colorado*.

An adaptation-level interpretation of assimilation for perceptual judgments. ALLEN PARDUCCI, *University of California, Los Angeles*.

Accommodation, illumination, and retinal image size. FRANCIS A. YOUNG, *Washington State University*.

Notes on an auditory vigilance technique. SEWARD SMITH AND PAUL HAAS, *HumRRO, Monterey, California*.

### Psychopharmacology I

ROBERT W. LEARY, *University of Oregon*, Chairman

The effects of post-trial injections of strychnine sulphate on maze learning. WILLIAM J. HUDSPETH, JAMES L. MCGAUGH, CALVIN W. THOMSON, AND WILLIAM H. WESTBROOK, *San Jose State College*.

Strain differences in the effect of 5-7-diphenyl-1-3-diazadamtan-6-OL (1757 I.S.) on maze learning. JAMES L. MCGAUGH, WILLIAM WESTBROOK, AND GEORGE BURT, *San Jose State College and University of California, Berkeley*.

Strain differences in facilitation of maze learning with post-trial injections of 5-7-diphenyl-1-3-diazadamtan-6-OL (1757 I.S.). WILLIAM H. WESTBROOK, JAMES L. MCGAUGH, AND CALVIN W. THOMSON, *San Jose State College*.

Effects of a strychnine-like drug on sexual behavior in male rats. GEORGE S. BURT, *University of California, Berkeley*.

Two instructional films on teaching machines and programmed learning.

### Psychometrics

MARY J. KIENZTLE, *Washington State University*, Chairman

Divergent thinking abilities in ninth grade students. P. R. MERRIFIELD, J. P. GUILFORD, AND ANNA B. COX, *University of Southern California*.

Sources of noncognitive variance in twenty-one measures of creativity. ALVIN MARKS, WILLIAM B. MICHAEL, AND HENRY F. KAISER, *Los Angeles State College, University of Southern California, and University of Illinois*.

A cross-cultural study of Filipino students with the WAIS. ELSIE V. GO AND STUART OSKAMP, *Claremont Graduate School*.

Birth order and intelligence at the university level. WILLIAM D. ALTUS, *University of California, Santa Barbara*.

Random response distributions to multiple-choice items. J. D. BROWER, H. E. ANDERSON, AND N. S. METFESSEL, *Douglas Aircraft Company, American Institute for Research, and University of Southern California*.

Comparative validity of two selection techniques developed by the job element approach. WILLIAM JASPER, *United States Naval Laboratories, California*.

Validity of mental ability tests for selecting clerical employees. ROGER STEWART, J. H. RAINWATER, JR., AND WILLIAM B. MICHAEL, *Los Angeles County Civil Service Commission and University of Southern California*.

### Personality I

LEWIS R. GOLDBERG, *University of Oregon*, Chairman

Experimental analysis of hypnosis by stimulated recall. VOLNEY FAW AND WARREN W. WILCOX, *Lewis and Clark College and Portland State College*.

Hypnosis, motivation, and performance. PERRY LONDON AND MARK FUHRER, *University of Illinois*.

The experimental arousal of feelings and well-being. LUBOR CAPEK, ALFRED JACOBS, AND JOHN F. MEEHAN, *University of Southern California*.

Temperament and emotions. ALFRED JACOBS, JOHN P.

MEEHAN, AND LUBOR CAPEK, *University of Southern California*.

The effect of arousal on cognition as a function of personality and cognitive style. HARRIETT A. PODELL, *University of California*.

A further study of the relationship between response bias and perceptual defense. SAMUEL HIMMELFARB, MICHAEL J. GOLDSTEIN, AND WALDA FEDER, *University of California, Los Angeles*.

Indifferent verbal responses as an index of homeostasis. I. M. ABOU-GHORRA, *Fresno State College*.

The abusing and the abused: A study of symbiosis in family interaction. HARVEY PESKIN, *San Francisco State College*.

Achievement imagery in the fantasy productions of superior and average college students. DAVID COLE, STEVEN JACOBS, BEA ZUBOK, BEVERLY FIELDS, AND IAN HUNTER, *Occidental College and University of Oregon*.

### Experimental II

RICHARD C. ATKINSON, *Stanford University*, Chairman

Early trauma, number of animals in a cage, and avoidance learning. RICHARD A. LITTMAN AND DAVID A. STEVENS, *University of Oregon*.

The effect of pre-imprinting experience on the following response in domestic chicks. CHARLES W. TOLMAN, *University of Washington*.

Effects of prenatal maternal anxiety upon offspring behavior in rats. RICHARD DAVID YOUNG, *University of Washington*.

The generality of mouse strain differences in learning. GERALD E. MCCLEARN, *University of California*.

Pretraining characteristics as predictors of avoidance learning patterns in rats. GEORGE C. STONE, *Langley Porter Neuropsychiatric Institute*.

### Clinical II

IVAN N. MENSCH, *University of California School of Medicine, Los Angeles*, Chairman

Psychosocial variables in treatment evaluation. IVAN N. MENSCH AND DONALD G. SIEGEL, *University of California School of Medicine, Los Angeles*.

Parental reinforcement, parental dominance, and therapist preference. JACK A. SHAFFER, *Humboldt State College*.

Selection and evaluation of a rating scale for estimating change in ward adjustment. ROBERT QUINN, EDWARD GOCKA, AND HAROLD BURK, *VA Hospital, American Lake, Washington*.

Relation of various indices of ward management to custodialism-humanism and authoritarianism-equality attitudes of staff in a large mental hospital.

SAUL TOOBERT AND FRANCES GILLESPIE SCOTT, *Camarillo State Hospital*.

Attitudes and institutional residence: Maturity and old age. ROBERT G. HADLEY, *VA Center, Los Angeles, California*.

### Applied Psychology and Human Engineering II

JAMES W. WHIPPLE, *Washington State University*, Chairman

Changes in perceptual "cue utility" at various stages of training on two dial reading tasks. HILDE GROTH AND JOHN LYMAN, *University of California, Los Angeles*.

The effect of direction of contrast on TV legibility under varying ambient illumination. ROBERT B. KELLY, *Dunlap and Associates*.

Binary coded decimal display methods of marking bit values in engineering psychology. ALBERT C. HALL AND JERRY N. BROADUS, *International Business Machines, San Jose, California*.

On the sequencing of instructional content. ROBERT F. MAGER, *Varian Associates, Palo Alto, California*.

Effects of ambient noise and nearby talkers on a face-to-face communication task. J. C. WEBSTER AND R. G. KLUMPP, *United States Navy Electronics Laboratory, San Diego, California*.

### Experimental III

PAUL McREYNOLDS, *VA Hospital, Palo Alto, California*, Chairman

The effect of varying absolute and relative amounts of reinforcement on the Amsel "FE." CHARLES A. MOSS AND NISSIM LEVY, *University of Portland*.

Taste preferences for sodium and nonsodium salts by adrenalectomized rats. MARVIN NACHMAN, *University of California, Riverside*.

Illumination preferences in rats reared under various lighting conditions. JOSEPH RUBENSTEIN, *VA Hospital, Palo Alto, California*.

The effects of adaptation levels in social perception on anxiety in mice. ALAN M. HARTMAN, *VA Hospital, Roseburg, Oregon*.

Exploratory behavior: A theoretical interpretation. PAUL McREYNOLDS, *VA Hospital, Palo Alto, California*.

### Clinical III

JOSEPH O. MATARAZZO, *University of Oregon Medical School*, Chairman

An analysis of suicidal MMPI data. N. L. FARBEROW, E. S. SHNEIDMAN, AND A. G. DEVRIES, *VA Center, Los Angeles, California*.

The fantasies of adolescents who as adults develop psychosomatic disorders. LOUIS H. STEWART, *University of California, Berkeley*.

Assessing treatment motivation of alcoholics: A predictive study. ALEXANDER R. NURSE, *Center for Treatment and Education on Alcoholism, Oakland, California*.

A preliminary study employing the sequential matching memory task in an attempt to differentially diagnose organic brain damage. HERBERT L. COLLIER AND NISSIM LEVY, *University of Portland*.

The relationship between age of walking, intelligence, and severity of motor involvement in children with spastic hemiplegia. HARRY L. SASLOW AND JOSIAH B. DODDS, *University of Oregon Medical School*.

### Child

SIDNEY W. BIJOU, *University of Washington, Chairman*

Shaping behavior and sharpening discrimination of retarded children in a free operant laboratory situation. S. W. BIJOU, R. ORLANDO, AND R. M. TYLER, *University of Washington*.

The control of operant responding by rate and content of verbal operants. O. IVAR LOVAAS, *University of Washington*.

The effects of withdrawal of a positive reinforcer on an extinguishing response in retarded children. DAVID A. MARSHALL, *University of Washington*.

Positive and negative reinforcement in discrimination learning. RUSSELL M. TYLER, *University of Washington*.

The effect of special training on the functional role of discriminative stimuli in free operant performance of retarded children. ROBERT ORLANDO AND TODD R. RISLEY, *University of Washington*.

The effect of aggressive story content on play behavior area: Experimental child. DIANE LARDER, *University of Washington*.

Reinforcement of aggression in children. CECIL HINSEY, *University of Oregon*.

### Psychopharmacology II

W. W. GRINGS, *University of Southern California, Chairman*

Effects of atropine and physostigmine on discrimination learning in the rat. JAMES M. WHITEHOUSE, *University of California, Los Angeles*.

The effects of chlorpromazine on discrimination efficiency. W. A. S. SMITH AND DONALD M. TRASK, *University of Redlands and University of Nevada*.

Effect of amphetamine in the serial discrimination learning of unilaterally operated monkeys. R. W.

LEARY, A. J. STYNES, AND J. M. WARREN, *University of Oregon and Pennsylvania State University*.

Effects of some CNS depressants on conditioned heart rate in dogs. ANDREW J. KAROLY, EDWARD F. DOMINO, AND EDWARD L. WALER, *Humboldt State College and University of Michigan*.

### Comparative and Physiological

F. D. KLOPPER, *Washington State University, Chairman*

Recent Russian work on cortical conditioning. FRANK WESLEY, *Portland State College*.

The effect of ventromedial hypothalamic lesions on septal self-stimulation. HAROLD WEINBERG AND MONCRIEFF SMITH, *University of Washington*.

The influence of pulse frequency, duration, and intensity of the rate of responding for intracranial stimulation. RICHARD E. KEESEY, *University of California, Los Angeles*.

The role of progesterone in the maternal behavior of rodents. DALE F. LOTT, *University of Washington*.

The quantitative gradient of sexual sensitivity in female rats. ROBERT E. KUEHN, *University of Washington*.

Dominance behavior of paired primates in two settings. ALICE BIERNOFF, ROBERT W. LEARY, AND RICHARD A. LITTMAN, *University of North Carolina and University of Oregon*.

Can Amsel's frustration effect be demonstrated in cats and monkeys? ROBERT L. CONNER AND NISSIM LEVY, *University of Portland*.

Brightness discrimination transposition by swine. F. D. KLOPPER, *Washington State University*.

Modification of cutaneous sensory transmission in the rat. ROBERT L. KING AND ROBERT P. ERICKSON, *University of Washington School of Medicine*.

### Learning II

FREDERICK A. COURTS, *Reed College, Chairman*

Continuity and noncontinuity in human concept learning. JAMES E. WHIPPLE, *Washington State University*.

Short-term retention as a function of verbal context. WILLIAM A. JOHNSTON, *Washington State University*.

Short-term retention as a function of item frequency. KENNETH E. LLOYD, *Washington State University*.

Massed and distributed practice at three levels of intelligence. MILLARD C. MADSEN, *San Jose State College*.

Application of stochastic models to children's concept formation with nonrepeated stimuli. ROSE GINSBERG AND PATRICK SUPPES, *Stanford University*.

Paired-associate learning with auditory stimuli and responses. MILTON METFESSEL, *University of Southern California*.

Learning without awareness as a function of problem solving set. WILLIAM RESCH AND JAMES L. MCGAUGH, *University of Oregon and San Jose State College*.

Variability in rotary pursuit skill under induced muscular tension. FREDERICK A. COURTS, *Reed College*.

### Personality II

FREDERICK R. FOSMIRE, *University of Oregon*, Chairman

Achievement fantasy as a function of probability of success. BERNARD I. MURSTEIN AND LAWRENCE V. EASTER, *Interfaith Counseling Center and Clark College*.

Studies in deviant verbal behavior: The relationship between word association commonality and yielding. FREDERICK R. FOSMIRE AND DAN RODE, *University of Oregon*.

Some problems in the reliability of the Adjective Check List. KAN YAGI AND MITCHELL M. BERKUN, *HumRRO, Monterey, California*.

The relationship between two measures of construct generality. HARRIE F. HESS, *Nevada State Department of Health*.

A statistical analysis of the 16 Personality Factor Questionnaire. EDWARD LEVONIAN, *University of California, Los Angeles*.

### Personality III

ROBERT L. WEISS, *VA Hospital, Palo Alto, California*, Chairman

Anxiety and interfering responses in college students and psychiatric patients. ROBERT L. WEISS AND MARVIN R. SHERMAN, *VA Hospital, Palo Alto, California, and Stanford University*.

The effects of anxiety, delay, and reinforcement on generalized expectancies. JOSEPH F. RYCHLAK AND JAY N. EACKER, *Washington State University*.

The effect on semantic structure of a control for social desirability. MARGERY H. KRIEGER, *VA Hospital, Seattle, Washington*.

The magnitude of the social desirability response set in the individual. ERLING E. BOE AND WILLIAM S. KOGAN, *Washington State University and VA Hospital, Seattle, Washington*.

The social desirability variable: A differential response to high and low value items. WILLIAM S. KOGAN

AND ERLING E. BOE, *VA Hospital, Seattle, Washington, and Washington State University*.

### Clinical IV

S. STANSFELD SARGENT, *VA Hospital, Phoenix, Arizona*, Chairman

Toward a general theory of psychotherapy. ERNST G. BEIER, *University of Utah*.

Behavior control and social responsibility. LEONARD KRASNER, *VA Hospital, Palo Alto, California*.

Interpersonal clues for a theory of psychotherapeutic technique. STEWART B. SHAPIRO, *Western Psychological Center*.

A microtheory explaining the psychopathology of the first three years of life. SAMUEL L. ORNSTEIN, *Washoe Medical Center, Reno, Nevada*.

### SYMPOSIA

#### Man in Space

PHILIP H. STERN, *Boeing Airplane Company*, Chairman

Participants: C. L. BOMMARITO, *Boeing Airplane Company*; HARLEY BOVEE, *Boeing Airplane Company*; ROBERT FITZPATRICK, *Boeing Airplane Company*; AND WOLF-ULRICH HEBENSTREIT, *Boeing Airplane Company*.

#### Response Stability and Variability in Psychometric Assessment

LEWIS R. GOLDBERG, *University of Oregon*, Chairman

Participants: RALPH M. RUST, *Yale University*; FREDERICK R. FOSMIRE, *University of Oregon*; AND LEWIS R. GOLDBERG, *University of Oregon*.

Discussants: LEONA E. TYLER, *University of Oregon*; AND HAROLD A. KORN, *Stanford University*.

#### A Phylogenetic Appraisal of Imprinting

JOHN P. SEWARD, *University of California, Los Angeles*, Chairman

Participants:

WILLIAM C. BECKWITH, *University of California*. Birds: Is there a critical period?

JOHN P. SEWARD, *University of California, Los Angeles*. Infrahuman mammals: What are the primary reinforcers?

DONALD M. BAER, *University of Washington*. Humans: Are they fit to imprint?

JOHN EISENBERG, *University of California*. A zoologist looks at imprinting.



**Motivation and Thinking**

W. EDGAR VINACKE, *University of Hawaii*, Chairman

Participants: E. R. HILGARD, *Stanford University*; IRVING MALTZMAN, *University of California*; AND RONALD C. JOHNSON, *San Jose State College*.

**Some Current Trends in School Psychology**

ELDON E. JACOBSEN, *Central Washington College*, Chairman

Participants: HENRY J. BERTNESS, *Tacoma Public Schools, Washington*; HELEN BOGARDUS, *Seattle Public Schools, Washington*; DAVID S. BRODY, *Oregon College of Education*; MAURICE F. FREEHILL, *Western Washington College*; THEODOR F. NAUMANN, *Central Washington College*; AND LLOYD L. LOVELL, *University of Oregon*.

Discussant: NADINE M. LAMBERT, *California State Department of Education*.

**Prediction and the Processes of Clinical Judgment**

HARRISON G. GOUGH, *University of California, Berkeley*, Chairman

Participants: KENNETH R. HAMMOND, *University of Colorado*; AND THEODORE R. SARBIN, *University of California, Berkeley*.

**Patterns of Reproductive Activity**

RICHARD E. WHALEN, *National Institute of Mental Health*, Chairman

Participants: LESTER A. KIRKENDALL, *Oregon State College*; JAMES R. WILSON, *University of California*; AND RICHARD E. WHALEN, *National Institute of Mental Health*.

Discussant: FRANK A. BEACH, *University of California, Berkeley*.

**Communication and the Cultural Barrier in Therapy**

GEORGENE H. SEWARD, *University of Southern California*, Chairman

Participants: S. STANSFELD SARGENT, *VA Hospital, Phoenix, Arizona*; FRED J. GOLDSTEIN, *Southern California Permanente Medical Group Psychiatric Services*; AND MELVIN J. LERNER, *Stanford University*.

Discussants: FRITZ SCHMIDL, *University of Washington*; AND JOSEPH E. WECKLER, *University of Southern California*.

**Role of the Internship in Predoctoral Clinical Training**

KENNETH B. LITTLE, *National Institute of Mental Health*, Chairman

Participants: FRED J. GOLDSTEIN, *Los Angeles Psychiatric Services, California*; WALTER KLOPPER, *Portland University*; LEONARD KRASNER, *VA Hospital, Palo Alto, California*; AND FRED R. FOSMIRE, *University of Oregon*.

**The Neurophysiological Bases of Behavior and the Next Breakthrough**

DAVID KRECH, *University of California, Berkeley*, Chairman

Participants:

DAVID KRECH, *University of California, Berkeley*. Biochemistry of neural tissue.

DONALD B. LINDSLEY, *University of California, Los Angeles*. Electrophysiology.

KARL PRIBRAM, *Stanford University School of Medicine*. Neural ablation.

ORVILLE SMITH, *University of Washington School of Medicine*. Implants and stimulation studies.

**Advantages and Difficulties of Organizing a State Division of School Psychologists**

HELEN BOGARDUS, *Seattle Public Schools, Washington*, Chairman

Participants: MARY L. BRANTLEY, *California Association of School Psychologists and Psychometrists*; DAVID BRODY, *Oregon Association of School Psychologists*; AND LLOYD LOVELL, *University of Oregon*.

**Research Perspectives in Alcohol Studies and Alcoholism**

DAVID A. RODGERS, *University of California, Los Angeles*, Chairman

Participants:

RICHARD F. DOCTER, *University of California School of Medicine, Los Angeles*. Conflicting conceptions of the reinforcing properties of alcoholic beverages.

KATE L. KOGAN AND JOAN K. JACKSON, *University of Washington School of Medicine*. Alcoholism and the family.

MAURICE KORMAN, *University of Texas Southwestern Medical School*. Factors affecting the alcohol consummatory behavior of rats.

DAVID A. RODGERS, *University of California, Los Angeles*. Physiological factors affecting alcohol preference of mice.

ALEXANDER C. ROSEN, *University of California School of Medicine, Los Angeles*. A consideration of research strategy into the alcoholic personality.

#### Problems of Field Testing Complex Man-Machine Systems

GERALD F. RABIDEAU, *Space Technology Laboratories, Los Angeles, California*, Chairman

Participants: MELVIN S. MAJESTY, *USAF Ballistic Missile Division, Los Angeles, California*; DAVID MEISTER, *General Dynamics Corporation, San Diego, California*; AND MAURICE RAPPAPORT, *Stanford Research Institute, Menlo Park, California*.

Discussant: BERTRAM J. SMITH, *General Electric Company, Philadelphia, Pennsylvania*.

#### Recent Trends in the Assessment of Personnel

CHARLES R. GROSS, *George Fry and Associates, Los Angeles, California*, Chairman

Participants:

THOMAS W. HARRELL, *Stanford University*. The assessment of behavior patterns for management potential.

CHARLES R. GROSS, *George Fry and Associates, Los Angeles, California*. Recent developments in the projective techniques of assessment of executive talent.

MACK T. HENDERSON, *Rohrer, Hibler and Replogle, Los Angeles, California*. Personality assessment by the clinical interview as related to executive development.

Discussant: FLOYD L. RUCH, *University of Southern California*.

#### INVITED ADDRESSES

ARTHUR A. LUMSDAINE, *University of California, Los Angeles*. Some Experimental Beginnings for a Sci-

ence of Instruction. LEONA A. TYLER, *University of Oregon*, Chairman.

FRANK A. BEACH, *University of California, Berkeley*. The Problem of Anthrocentrism in a Science of Behavior. ROBERT W. LEEPER, *University of Oregon*, Chairman.

ERNEST R. HILGARD, *Stanford University*. A Developmental-Interactive Theory of Hypnosis. ROBERT W. LEEPER, *University of Oregon*, Chairman.

ERNEST R. HILGARD, *Stanford University*. An Overview of the Direction of Modern Learning Theory. M. BREWSTER SMITH, *University of California, Berkeley*. Mental Health Reconsidered: A Special Use of the Problem of Values in Psychology. ALLEN L. EDWARDS, *University of Washington*, Chairman.

DONALD B. LINDSLEY, *University of California, Los Angeles*. Activation, Arousal, and Attention. JAMES H. ELDER, *Washington State University*, Chairman.

NANCY BAYLEY, *National Institute of Mental Health*. Some Nonintellective Factors in Mental Growth. CHARLES R. STROTHER, *University of Washington*, Chairman.

WILLIAM K. ESTES, *Indiana University*. The Human Observer and the Computer as Diagnostic Instruments. ERNEST R. HILGARD, *Stanford University*, Chairman.

#### SPECIAL MEETINGS

Workshop for Officers of State Associations. Sponsored by the APA Board of Professional Affairs. JOSEPH M. BOBBITT, *National Institute of Mental Health*, Chairman.

Meeting of Washington State School Psychologists.

Business Meeting of Psi Chi.

Business Meeting of the Washington State Psychological Association.

#### PRESIDENTIAL ADDRESS

DAVID KRECH, *University of California, Berkeley*. Divide and Conquer.

# PROCEEDINGS OF THE THIRTY-THIRD ANNUAL MEETING OF THE MIDWESTERN PSYCHOLOGICAL ASSOCIATION

I. E. FARBER, Secretary-Treasurer

*University of Iowa*

THE Midwestern Psychological Association held its thirty-third Annual Meeting at the Hotel Morrison, Chicago, on May 4-6, 1961, with 1,801 registered. The program consisted of 187 papers, 6 symposia, a workshop sponsored by the APA Board of Professional Affairs, and a Psi Chi meeting.

The Presidential Address, "Experimental Extinction in Learning and Memory," was delivered by Marion E. Bunch, Washington University.

The Program Committee consisted of Willard A. Kerr, Chairman, Frank Auld, Jr., Frederick A. Mote, and I. E. Farber. George S. Speer served as Convention Manager. Local Arrangements Committee Chairmen included John L. Holland, Theodore Schaffer, Jr., Nathan Glaser, William Kulick, David Kopel, Marvin Burack, and Kenneth W. Eells. Janice P. Fish and Michael Amrine of the APA Central Office assisted with placement and public information, respectively.

Newly elected officers were: I. E. Farber, President, 1961-62; Donald R. Meyer, Secretary-Treasurer, 1961-64; Edward L. Walker, Council Member, 1961-64; Ernest J. McCormick, Council Member, 1961-63; and James M. Vanderplas, Council Member, 1961-62.

The business meeting accepted 258 new and reinstated members, bringing the total membership to 2,461. According to the standing practice of the association, any APA member may automatically become a member of MPA by payment of dues (\$1.50 for 1 year, \$4.00 for 3 years) to the Secretary-Treasurer. Those joining before the program deadline, February 15, 1962, may submit papers for the next meeting.

The 1962 meeting will be held May 3-5 in the Hotel Morrison, Chicago, Illinois.

The following were elected to life membership:

Warren Baller  
Lewis E. Drake  
Swan A. Engwall  
Edward B. Greene  
Virginia Kirk

C. J. Leuba  
E. F. Patten  
Helen Peak  
Hazel Stevens  
L. E. Wiley

The following 152 APA members joined during the year ending May 1, 1961:

Naomi Arond  
Thomas J. Banta  
Wesley C. Becker

Paul Beckman  
Frances L. Behan  
Allen E. Bergin

Frances V. Berry  
William Bevan  
Helen Miriam Bishop  
J. Howard Bryant  
Donald F. Caldwell  
Richard J. Campbell  
L. Dennis Cannon  
Daniel V. Caputo  
Archie B. Carran  
Bishwa B. Chatterjee  
Linda G. Cieutat  
Victor J. Cieutat  
Fogle C. Clark  
Robin J. Clyde  
Irwin H. Cohen  
Anthony Davids  
George E. Deane  
Arnon E. Deguisne  
Henry J. de Haan  
Doris DeHardt  
Fred de Wit  
Richard C. Diedrich  
Robert Doering  
Herbert Dörken  
David L. Easley  
Norman S. Endler  
E. Ross Epling  
Betsy Worth Estes  
John Feldhusen  
John L. Fletcher  
Garlie A. Forehand, Jr.  
Harry Fowler, Jr.  
Douglas W. Freed  
Walter H. Friedhoff  
John Gaito  
Theresa Garbus  
Gertrude Z. Gass  
Louise W. Gates  
Duilio Giannitrapani  
B. von Haller Gilmer  
Donald D. Glad  
Henry Gluck  
Morton Goldman  
Harry Goldsmith  
Sanford Golin  
Charles L. Goodrick  
Leonard E. Gottesman  
David P. Grace  
James L. Hafner  
David T. Hakes

Ruth Hardwick  
Arthur E. Harriman  
Theodore L. Harris  
Willard W. Hartup  
Joan M. Havlena  
Kenneth Heller  
Peter W. Hemingway  
Donald R. Henry  
Donald J. Hillis  
William C. Holz  
Edmund S. Howe  
Donald P. Hoyt  
C. Wesley Jackson, Jr.  
Noel Jenkin  
Elizabeth Z. Johnson  
Reginald Jones  
James J. Kirkpatrick  
Herbert Klausmeier  
P. Robert Knaff  
Charles Kram  
Earl J. Kronenberger  
Alfred E. Kuenzli  
Carl J. Lange  
Donald L. Leslie  
L. W. Littig  
Perry London  
Ralph S. Long, Jr.  
John M. McCauley  
Charles D. McDermid  
Warren C. McGovney  
Edward J. Manley  
Phillip A. Marks  
Arnold Mechanic  
Clinton R. Meek  
Warren J. Meyer  
M. J. Minas  
H. William Morrison  
Howard A. Moss  
Jay B. Mowbray  
John M. Newell  
Richard C. Nickeson  
John E. Nickols, Jr.  
Fred H. Nothman  
James Olds  
Gordon W. Olson  
Kenneth D. Orton  
Donald E. Pehlke  
Margaret Peterson  
C. Kermit Phelps  
Robert R. Phillips

Robert A. Pierson  
 Marc Pilisuk  
 Robert Joe Piltz  
 Louis T. Pope  
 Norman L. Rasch  
 Gustave J. Rath  
 Ned L. Reglein  
 Howard Reineman  
 Gerald A. Reynolds  
 Malcolm H. Robertson  
 Serafim Romberg  
 Irvin Roth  
 Saul R. Rotman  
 Vinton Rowley  
 Ira J. Semler  
 Kermit E. Seversen  
 Joseph G. Sheehan  
 Joel E. Shelton  
 Julia Sherman  
 Lawrence Siegel  
 Lila C. Siegel  
 George Sivanich  
 Robert G. Smith, Jr.

George R. Soika  
 Robert Soskin  
 Robert L. Sprague  
 John R. Stabler  
 Norman E. Stander  
 Lawrence M. Stewart  
 F. Beth Stone  
 Roberta Strain  
 Edward S. Sulzer  
 Robert M. Taylor  
 Don C. Teas  
 David R. Thomas  
 Donald G. Tritt  
 Ledyard R. Tucker  
 Mark Tucker  
 Ed Ware  
 Ronald M. Wilcox  
 John Withall  
 Benjamin D. Wright  
 George N. Wright  
 Ray S. Yamahiro  
 Stanley P. Zarlock  
 Fred M. Zimring

Stephen P. Klein  
 James H. Koplin  
 Harlan L. Linsley  
 Eugene A. Lovelace  
 Albro L. Lundy, Jr.  
 Albert Marston  
 James Gordon Martin  
 Mary Lou Maxwell  
 Angelo J. Micocci  
 Robert John Miller  
 William G. Miller  
 Kenton L. Monroe  
 John Moore  
 Herman Morris  
 Walter F. Murphy  
 Gediminas Namikas  
 Allan J. Nash  
 Larry R. Nye  
 Mary Otteson  
 Ronald Penney  
 David Lee Peters

Frank H. Price, Jr.  
 Kendall O. Price  
 Winifred D. Riach  
 Martin Richter  
 Leslie G. Rutherford  
 Arthur Schulman  
 William Sedlacek  
 Charles Sheridan  
 Francene Silbiger  
 Jerome Singer  
 Richard Thysell  
 Milton A. Trapold  
 Robert Treichler  
 Bien Tsujioka  
 William H. Vermillion, Jr.  
 Louise Vetter  
 Henry M. Weeks  
 Keith A. Wollen  
 Floyd Wylie  
 Leonards Zusne  
 Steve J. Zyzanski

The following 72 non-APA applicants were elected to membership:

Lawrence Abrams  
 Charles Allen  
 Paul J. Ansfield  
 Daniel Norman Braunstein  
 James Calkins  
 Howard C. Carlson  
 Kenneth Castelli  
 David Connor  
 Barbara M. Dean  
 W. Edwin DeVoy  
 Thomas E. Dubois  
 Ronald A. Esposito  
 Max Fogel  
 Philip Freedman  
 Jay Friedland

Jeannette Gehring  
 Daniel Glasner  
 Garry Goldenberg  
 Don M. Goodrich  
 Stephen W. Gornik  
 Gordon Z. Greenberg  
 Robert Charles Hauck  
 Gloria Heiman  
 Norman D. Henderson  
 Hal Hendrick  
 Grace Hinrichs  
 John P. Hostetler  
 Suzanne James  
 Florence Johnson  
 Arthur Jones

The following 34 members were reinstated:

David Bakan  
 Robert A. Baker  
 Richard A. Behan  
 Willard L. Brigner  
 Marvin Burack  
 William M. Canning  
 E. L. Clark  
 Albert Eglash  
 Robert L. French  
 Sumner C. Hayward  
 Edwin Paul Hollander  
 Howard O. Holt  
 Wendell E. Jeffrey  
 Seymour Levy  
 Erwin J. Lotsof  
 William H. Lyle, Jr.  
 Raymond C. Miles

R. Dale Nance  
 Constance B. Nelson  
 Rollin M. Patton  
 W. Neal Phelps  
 W. Sharman Phillips  
 N. L. Pielstick  
 Homer B. C. Reed, Jr.  
 Mary D. Rootes  
 Ian Steele Russell  
 Donald P. Scharlock  
 William Seeman  
 Denzel D. Smith  
 James W. Taylor  
 Roy E. Warman  
 Albert E. Wibbenmeyer  
 Walter L. Wilkins  
 John E. Williams

## PROGRAM

### PAPER SESSIONS

Abstracts of papers have been deposited with the American Documentation Institute. Order Documents No. 6779-6805 from ADI Auxiliary Publications Project, Photoduplication Service, Library of Congress; Washington 25, D. C., remitting in advance the indicated price for microfilm or photocopies. Make checks payable to: Chief, Photoduplication Service, Library of Congress.

TITLE	ADI NO.	MICRO-FILM	PHOTO-STAT
Social Psychology	6782	\$2.00	\$3.75
Psychopharmacology	6783	2.00	3.75
Verbal Learning	6784	2.00	3.75
Perception	6796	2.00	3.75

TITLE	ADI NO.	MICRO-FILM	PHOTO-STAT
Animal Reinforcement Conditions	6797	2.00	3.75
Personality Assessment	6798	2.00	3.75
Higher Processes I	6799	1.75	2.50
Sensory Processes	6805	2.00	3.75
Mathematical Behavior Models I	6790	2.00	3.75
Brain Functions	6791	1.75	2.50
Verbal Behavior	6792	2.00	3.75
Animal Learning	6793	2.00	3.75
Personality Dynamics	6794	2.00	3.75
Comparative and Genetic Psychology	6795	2.00	3.75
Somatic Variables and Learning	6779	1.75	2.50



TITLE	ADI NO.	MICRO-FILM	PHOTO-STAT
Schizophrenia	6780	2.00	3.75
Attitudes and Attitude Change	6781	2.00	3.75
Human Conditioning I	6788	1.75	2.50
Engineering, Personnel, and Training	6789	2.00	3.75
Animal Motivation	6800	1.75	2.50
Higher Processes II	6801	1.75	2.50
Early Experience	6802	2.00	3.75
Psychodiagnostic Testing	6803	2.00	3.75
Human Motive-Incentive Conditions	6804	2.00	3.75
Mathematical Behavior Models II	6785	2.00	3.75
Clinical Psychology	6786	1.75	2.50
Human Conditioning II	6787	1.75	2.50

### Social Psychology

WILLIAM C. KOSINAR, *Wilson Junior College*, Chairman

The effect of team competition and success on the adjustment of group members. ALBERT E. MYERS AND FRED E. FIEDLER, *University of Illinois*.

The distribution of participation in small discussion groups. HARRY P. SHELLEY, *University of Nebraska*.

The effects of experimentally modified perceptions of similarity and dissimilarity on social adjustment and behavior. SHELDON ALEXANDER AND EUGENE DRUCKER, *Southern Illinois University and University of Illinois*.

The conditioning and generalization of changes in perceptual dispositions. LEON H. LEVY, *Indiana University*.

A comparison between English-speaking and French-speaking Canadian students in terms of social desirability perceptions. GILLES A. AUCLAIR AND ROBERT BLAIN, *University of Montreal and Civil Service Commission of Canada*.

The competence of the model and the learning of imitation and nonimitation. MILTON E. ROSENBAUM AND IRVING F. TUCKER, *University of Iowa*.

The influence of response conditions on recognition thresholds for taboo words. FRED H. NOTHMAN, *American University*.

Experimental slavery in monkeys. JAMES A. HOREL, F. ROBERT TREICHLER, AND DONALD R. MEYER, *Ohio State University*.

### Psychopharmacology

JACK WERBOFF, *Lafayette Clinic*, Chairman

Latency-measured conditioned emotional response procedures. OAKLEY S. RAY AND AMEDEO S. MARRAZZI, *VA Research Laboratories in Neuropsychiatry*.

Effect of meprobamate on an aversively controlled discrimination in normal rats and rats with lesions

in the septal forebrain. JOHN A. HARVEY AND HOWARD F. HUNT, *University of Chicago*.

Effects of amphetamine and hunger on exploratory behavior and latent learning in rats. GERALD A. DOYLE AND N. JAMES CARLSON, *Western Reserve University*.  
Reinforcing effects of a synthetic opiate in conditioning of drug seeking behavior in rats. PHILLIP C. GREEN, FRANK T. PESCOR, AND ABRAHAM WIKLER, *National Institute of Mental Health*.

The Hebb-Williams maze as a measuring device for LSD effects in rats. PAUL J. ANSFIELD AND JOHN I. JOHNSON, JR., *Purdue University and Marquette University*.

The effects of chlorpromazine on the extinction of intercurrent avoidance and appetitive responses in the cat. MICHAEL F. HALASZ AND HOWARD F. HUNT, *University of Chicago*.

Induced phenylpyruvic oligophrenia in infant monkeys. GAIL PALMER, HARRY F. HARLOW, AND HARRY A. WAISMAN, *University of Wisconsin*.

Simulation of schizophrenic performance with sernyl, LSD-25, and amobarbital (amytal) sodium: Symbolic and sequential thinking. BERTRAM D. COHEN AND GERALD ROSENBAUM, *Lafayette Clinic and Wayne State University*.

Evaluating subjective effects of six drugs by means of an especially designed inventory. CHARLES A. HAERTZEN, ALBERT B. WOLBACH, JR., ABRAHAM WIKLER, AND HARRIS E. HILL, *National Institute of Mental Health*.

### Verbal Learning

RUDOLPH W. SCHULZ, *University of Iowa*, Chairman

Retention of "heard" and "heard-seen" nonsense syllables in heterogeneous and homogeneous lists. HERBERT GERJUOY, *University of Toledo*.

Partial serial-position constancy in nonserial paired-associate learning. WILLIAM F. BATTIG AND SAM C. BROWN, *University of Virginia*.

The influence of serial vs. random presentation of paired-associates. CLESSEN J. MARTIN AND ELI SALTZ, *Wayne State University*.

List difficulty, presentation rate, and segmental repetition in serial verbal learning of patterned lists. LEONARD E. JARRARD AND LEE W. GREGG, *Washington and Lee University and Carnegie Institute of Technology*.

Stimulus-term and response-term recall as functions of number of paired-associate training trials. JOSEPH W. CUNNINGHAM, SLATER E. NEWMAN, AND CLIFTON W. GARY, *Purdue University and North Carolina State College*.

Acquisition of paired-associates under differential instructions with recall and recognition tests. FRANK

- DaPolito, John Caseday, Pene Kegel, Katherine McCollum, and William K. Estes, *Indiana University*.
- The bidirectional learning of paired-associates. IRVING J. SALTZMAN, *Indiana University*.
- The influence of distribution of practice and presentation interval on incidental rote learning. GLORIA J. FISCHER and MARY R. BAKER, *University of Oklahoma and University of California, Berkeley*.

### Perception

A. B. KRISTOFFERSON, *University of Cincinnati*, Chairman

- Stereoscopic fusion of near vertical retinal contours. GEORGE S. HARKER, *United States Army Medical Research Laboratory, Fort Knox, Kentucky*.
- Frame effect in space and time perception. KAROL M. SAYONS and MARILYN K. RIGBY, *St. Louis University*.
- The relative contributions of complexity and symmetry to the perception of form. SHELDON K. EDELMAN, GEORGE G. KARAS, and BARRY J. COHEN, *Iowa State University and Martin Company*.
- Variables affecting the perceptual learning of random shapes. CHARLES L. GOODRICK, *VA Research Laboratories in Neuropsychiatry*.
- Response tendencies in visual detection of single targets. GORDON F. FITZ and HARRY W. KARN, *Carnegie Institute of Technology*.
- Decrement to the Muller-Lyer illusion during repeated sessions. PAUL T. MOUNTJOY, *Denison University*.
- Loudness constancy. JOHN T. GREENE, *Bowling Green State University*.
- The effect of an imagined anchor upon an absolute judgment scale. PETER A. MAGARO and CHARLES W. ERIKSEN, *University of Illinois*.

### Animal Reinforcement Conditions

- LEONARD E. ROSS, *University of Wisconsin*, Chairman
- Secondary reinforcement strength and primary reinforcement schedule. HARVARD L. ARMUS, W. EDWIN DEVOY, TERRY EISENBERG, STEVEN SCHROEDER, and MARCIA M. GARLICH, *University of Toledo*.
- Secondary reinforcement as a suppressor. STANLEY J. WEISS and REED LAWSON, *Ohio State University*.
- Evocation and learning tests for secondary reinforcement. F. J. MCGUIGAN, BARBARA EQUEN, and JUDITH STELLINGS, *Hollins College*.
- Development of reinforcing properties of a stimulus as a function of various temporal relationships to food reinforcement. MELVIN H. MARX and FREDERICK A. KNARR, *University of Missouri*.
- Rate-differential reinforcement in monkey manipulation. DAVID PREMACK, *University of Missouri*.

Escape performance as a function of the delay of reinforcement. HARRY FOWLER and MILTON A. TRAPOLD, *University of Pittsburgh and University of Iowa*.

Latent extinction as a function of two reward variables. LAWRENCE W. DACHOWSKI and ARTHUR R. THOMAS, *University of Illinois and West Virginia University*.

Extinction effects under changed stimulus conditions following 50% and 100% reinforcement. SALLY E. SPERLING and DAVID BIRCH, *University of Minnesota and University of Michigan*.

### Personality Assessment

JOEL T. CAMPBELL, *Western Reserve University*, Chairman

- A technique for predicting over- and underachievement through objective testing. LEONARD J. KAZMIER and C. G. BROWNE, *Wayne State University*.
- Adaptive regression and creativity. IRWIN H. COHEN, *Mental Health Institute, Independence, Iowa*.
- Anxiety as a function of change in sex role. E. F. MORGAN, JR., G. ROSENBERG, and B. SUTTON-SMITH, *Alma College and Bowling Green State University*.
- Divergent thinking, age, and intelligence in white and Negro children. IRA ISCOE and JOHN PIERCE-JONES, *Harvard University and University of Texas*.
- Variability in children's values in eight countries as a function of situational differences. LEIF G. TERDAL and GLADYS L. ANDERSON, *Michigan State University*.
- A factor analysis of the California Psychological Inventory. JOHN O. CRITES, HAROLD P. BECHTOLDT, LEONARD D. GOODSTEIN, and ALFRED B. HEILBRUN, JR., *University of Iowa*.
- Factor analysis and behavioral correlates of the Draw-a-Person Test. ROBERT C. NICHOLS, DEONANDUS J. W. STRUMPFER, and PETER M. LEWINSOHN, *Purdue University, Potchefstroom University, and LaRue Carter Hospital*.

### Higher Processes I

ISIDORE GORMEZANO, *Indiana University*, Chairman

- Simultaneous conditioning of two responses to a paired-associate stimulus. EDWARD J. CROTHERS and WILLIAM K. ESTES, *Indiana University*.
- Effect of redundancy within a stimulus sequence upon discrimination learning. LYLE E. BOURNE, JR., *University of Utah*.
- Discrimination learning set in preschool children. BILLEY LEVINSON and HAYNE W. REESE, *University of Buffalo*.
- Perseveration as a function of degree of learning and percentage of reinforcement in card sorting. ALBERT

- ERLEBACHER AND E. JAMES ARCHER, *University of Wisconsin*.  
 Expectancy changes, reinforcement schedules, and latency of response. ERWIN J. LOTSOFF, *Louisiana State University*.  
 Verbal conditioning: Discrimination and awareness. JOHN F. MCBREARTY AND FREDERICK H. KANFER, *Purdue University*.

### Sensory Processes

ALFRED LIT, *Bendix Systems Division*, Chairman

- Acuity requirements for the recognition of blurred forms. GIRARD W. LEVY AND MILTON A. GRODSKY, *Martin Company*.  
 Localization of peripheral light flashes. ALFRED J. KRAEMER, DAVID L. EASLEY, AND MEREDITH J. HALL, *Human Resources Research Office, Fort Knox, Kentucky*.  
 Photographic and spectroscopic studies of color phenomena produced by rotating black and white discs. ALAN H. ROBERTS AND WILLIAM E. GREEN, *New Mexico Highland University*.  
 Electroretinographic luminosity functions of the night monkey *Actus trivirgatus*. ARTHUR E. JONES, GERALD H. JACOBS, AND RUSSELL L. DE VALOIS, *Indiana University*.  
 Auditory pattern perception with click pairs. WILLARD R. THURLOW, *University of Wisconsin*.  
 Use of the Blough technique with cats: Determination of auditory frequency discrimination thresholds. LARRY FRAZIER AND D. N. ELLIOTT, *Henry Ford Hospital*.  
 Qualitative similarity of odors. R. H. WRIGHT AND K. M. MICHELS, *Purdue University*.  
 A correlation evaluation of two scaling methods for qualitative odor judgments. DAVID S. PHILLIPS, *Purdue University*.  
 A determination of sugar-quinine isohedons for the rat. RICHARD BURRIGHT, WILLIAM DEMARCO, AND WILLIAM E. KAPPAUF, *University of Illinois*.

### Mathematical Behavior Models I

MAX S. SCHOEFFLER, *Bell Telephone Laboratories*, Chairman

- The relative effects of forced reward and forced non-reward during successive discrimination reversal. KEITH N. CLAYTON, *Vanderbilt University*.  
 Probability learning with nonreinforced trials. LEO KELLER, CLETUS J. BURKE, AND ALLEN M. SCHNEIDER, *Indiana University*.  
 The role of the competing response in probabilistic verbal acquisition. JAMES F. VOSS, *College of Wooster*.

- A partial reinforcement procedure for T maze probability learning. SAMUEL H. REVUSKY, *VA Hospital, Northampton, Massachusetts*.  
 Response latency as a function of  $\pi$  in a modified prediction situation. KIRK H. SMITH AND DAVID LABERGE, *University of Minnesota*.  
 Nonreinforcement and neutralization of stimuli. JAMES G. GREENE, DAVID LABERGE, AND O. F. PETERSON, *University of Minnesota*.

### Brain Functions

HARRY J. JERISON, *Antioch College*, Chairman

- A behavioral analysis of cats with extensive neocortical ablations. PATRICIA MORGAN MEYER, *Ohio State University*.  
 The effect of bilateral hippocampal lesions on simultaneous and successive brightness discrimination in the rat. DANIEL PORTER KIMBLE AND ROBERT LEE ISAACSON, *University of Michigan*.  
 Septal lesions reduce the inhibitory effects of punishment. HOWARD J. SIMMONS AND GARTH J. THOMAS, *University of Illinois*.  
 The neurological and psychological significance of Gerstmann's syndrome. RALPH M. REITAN AND ROBERT F. HEIMBURGER, *Indiana University Medical Center*.  
 The significance of age in the learning of a complex psychomotor task by brain-damaged and non-brain-damaged subjects. HOMER B. C. REED, JR., *Indiana University*.  
 Reminiscence in inverted alphabet printing as a function of degree of EEG abnormality. MANFRED J. MEIER, *University of Minnesota*.

### Verbal Behavior

A. R. BAGGALEY, *University of Wisconsin-Milwaukee*, Chairman

- A grammatical study of free association. ERWIN M. SEGAL AND JAMES J. JENKINS, *University of Minnesota*.  
 Grammatical constraints and free association responses. JAMES J. JENKINS, PHILIP B. GOUGH, DAVID T. HAKES, AND ERWIN M. SEGAL, *University of Minnesota*.  
 Paradigmatic similarity and word association. PHILIP B. GOUGH AND JAMES J. JENKINS, *University of Minnesota*.  
 Recall and recognition measures of immediate memory. JAMES H. KORN AND JOHN C. JAHNKE, *Carnegie Institute of Technology and Miami University*.  
 Short-term retention of paired-associate lists. GEOFFREY KEPPEL AND BENTON J. UNDERWOOD, *Northwestern University*.

The role of stimulus and response familiarization (n) in paired-associate verbal learning. DAVID T. HAKES, *University of Minnesota*.

The effects of stimulus association value and exposure duration on R-S learning. EDWIN H. CASSEM AND DONALD H. KAUSLER, *St. Louis University*.

The effects of meaningfulness and practice on simultaneous intentional and incidental learning. ARNOLD MECHANIC, *Northwestern University*.

### Animal Learning

KENNETH P. GOODRICH, *University of Pennsylvania*, Chairman

The effect of running to formerly positive or negative goal boxes on resistance to extinction. DAVID E. SILBER, JOHN NYGAARD, AND PAUL GAMES, *University of Michigan and Ohio University*.

Extinction as a function of number of acquisition trials and extinction intertrial interval. MICHAEL COLE AND FRED ABRAHAM, *Indiana University*.

Resistance to extinction and the discrimination hypothesis. WILLIAM F. REYNOLDS AND PHILIP E. FREEDMAN, *Rutgers University and University of Iowa*.

The effects of equal reinforcement of the positive and negative discriminanda of a learned discrimination. LEONARD E. ROSS, *University of Wisconsin*.

Serial reversal learning as a function of the number of trials per reversal. BENJAMIN H. PUBOLS, JR., *University of Miami*.

The role of visual monitoring of responses in primate pattern discrimination learning. MARY OTTESON, CHARLES L. SHERIDAN, AND DONALD R. MEYER, *Ohio State University*.

The effects of response induced, stimulus change, primate, discrimination learning. CHARLES L. SHERIDAN, MARY I. OTTESON, AND DONALD R. MEYER, *Ohio State University*.

A free operant test of the discrimination hypothesis. DAVID G. BORN AND REED LAWSON, *Ohio State University*.

Time between presentation of stimuli as a variable in simultaneous and successive discrimination problems. D. W. TYLER, *Louisiana State University*.

### Personality Dynamics

RUDOLPH C. WALDSCHMIDT, *Valparaiso University*, Chairman

Alternation after forced choices as a function of dominance in women. ROBERT TARTE AND HENRY E. KLUGH, *Alma College*.

Performance of extroverts and introverts under massed and distributed practice. EUGENE LOVELACE, I. E. FARBER, AND JOAN H. CANTOR, *University of Iowa*.

Sources of frustration and targets of aggression: A cross-cultural study. LEIGH MINTURN TRIANDIS AND WILLIAM W. LAMBERT, *University of Illinois and Cornell University*.

Conformity and level of aspiration behavior. SHEPARD LIVERANT AND MIRIAM ODELL, *Ohio State University*.

The need for social approval, task categorization, and perceptual defense. CHRISTOPHER E. BARTHEL AND DOUGLAS P. CROWNE, *Ohio State University*.

Motivation and set in acquiring information about people. EARL R. CARLSON, *Michigan State University*.

Stimulus vividness and anxiety level in incidental-intentional learning. MARILYN E. MILLER AND JOYCE A. DOST, *University of Wisconsin-Milwaukee*.

The effects of anxiety, need achievement, and task importance upon performance of an intelligence test. LAWRENCE S. WRIGHTSMAN, JR., *George Peabody College for Teachers*.

### Comparative and Genetic Psychology

RAYMOND C. MILES, *University of Alberta*, Chairman

Conditionability of two-headed planaria. EDWARD N. ERNHART, *Washington University*.

Photosensitivity of the amoeba as a function of hue. LLOYD HITCHCOCK, JR., *Purdue University*.

Shape constancy in the raccoon. K. M. MICHELS AND T. SPIRITOSO, *Purdue University*.

Species difference in the effect of reward and nonreward in the discrimination learning of monkeys. R. W. LEARY AND D. A. STEVENS, *University of Oregon*.

Reinforcing effects of various social activities for chimpanzees. WILLIAM A. MASON, *Yerkes Laboratories of Primate Biology*.

Effects of prenatal X-irradiation on the development of motor performance in the rat. JACK WERBOFF, IRVING GOODMAN, AND JOAN HAVLENA, *Lafayette Clinic*.

Dominant and intermediate inheritance of behavior in mice. JAN H. BRUELL, *Western Reserve University*. Genetics, age, and the variability of learning performances. GILBERT W. MEIER, *Vanderbilt University*.

### Somatic Variables and Learning

DAVID T. LYKKEN, *University of Minnesota*, Chairman

Electroconvulsive shock as an unconditioned stimulus. DONALD J. LEWIS AND HENRY E. ADAMS, *Louisiana State University*.

Heart rate conditioning: Fact or artifact. JOHN A. STERN AND THOMAS J. WORD, *Washington University School of Medicine*.



Maze learning and open field behavior of adrenalectomized rats. JOAN HAVLENA AND COLEMAN PAUL, *Lafayette Clinic*.

The effect of degree of emotionality and number of cues upon avoidance conditioning to X-irradiation. JACK ARBIT, *Northwestern University Medical School*.

Sex and radiation as factors in peripheral cue discrimination learning. ARNOLD A. McDOWELL AND W. LYNN BROWN, *University of Texas*.

Skin conductance levels and verbal recall. RICHARD N. BERRY, *Indiana University*.

### Schizophrenia

NORMAN GARMEZY, *University of Minnesota*, Chairman

Social interaction and severity of emotional disturbance. WILLIAM H. BARBER, MARILYN K. RIGBY, AND ALBERT F. WESSEN, *St. Louis University and Washington University*.

Self-actualization in choice scores of improved and unimproved chronic schizophrenic patients. ROBERT S. NEMO AND ROY M. HAMLIN, *VA Hospital, Danville, Illinois*.

Toward a classification of ego strength in schizophrenia. DAVID LEVINE, *University of Nebraska*.

Generalization-like phenomena in schizophrenia. LOREN J. CHAPMAN AND JEAN P. CHAPMAN, *University of Kentucky*.

The effects of psychopathology on two dimensions of cognition. JAMES L. GRISSELL AND BERTRAM D. COHEN, *Lafayette Clinic*.

Forced choice word associations in schizophrenics. LEONARD E. GOTTESMAN, *University of Michigan*.

Effect of content upon thinking in schizophrenia. PETER M. LEWINSOHN AND ANN RIGGS, *LaRue D. Carter Memorial Hospital*.

### Attitudes and Attitude Change

FRANK J. HOLMES, *Illinois Wesleyan University*, Chairman

The influence of item grammatical complexity on scale values derived by the method of equal appearing intervals. LEROY WOLINS, ARTHUR C. MACKINNEY, AND SHARON K. EFFENBERGER, *Iowa State University*.

A method of applying magnitude estimation to attitude scale construction. PAUL F. WERNIMONT, ARTHUR C. MACKINNEY, AND LEROY WOLINS, *Iowa State University*.

The influence of brains, beauty, residence, and religion on social choice. SUE EVITTS AND BENJAMIN WRIGHT, *University of Chicago*.

An exploratory study of centrality of beliefs and perceived consensus. ALBERT ZAVALA AND MILTON ROKEACH, *Michigan State University*.

Effectiveness of prior defenses in producing resistance to "black" and "white" propaganda. WILLIAM J. MCGUIRE, *University of Illinois*.

A multiple scalogram analysis of United Nations voting. ALICIA MAY BROWN Y BENDANA AND CHARLES WRIGLEY, *Michigan State University*.

Variables associated with student preference in the 1960 presidential election. ANDREW R. BAGGALEY, *University of Wisconsin-Milwaukee*.

Some relationships between rated importance and satisfaction expressed on factors measuring job satisfaction. ROBERT E. CHANDLER, *General Motors Corporation*.

### Human Conditioning I

K. E. MOYER, *Carnegie Institute of Technology*, Chairman

A study of conditioning. WILLIAM F. PROKASY AND JOHN F. HALL, *Pennsylvania State University*.

The GSR as a function of classical conditioning, "instructional" conditioning, and clinical anxiety. D. GENE DAVENPORT, *St. Louis University*.

Rate of GSR conditioning related to intelligence level. CHARLES F. HANER AND MICHAEL J. CHANDLER, *Grinnell College and University of California*.

Incubation effect: Role of awareness in an immediate vs. delayed test of conditioned emotionality. SANFORD GOLIN, *University of Wisconsin-Milwaukee*.

### Engineering, Personnel, and Training

ROBERT GLASER, *American Institute for Research*, Chairman

Factored life history antecedents of research creativity and productivity. ROBERT F. MORRISON AND WILLIAM A. OWENS, JR., *Purdue University*.

Synthetic validity for selection in a small organization. ROBERT M. GUION, *Bowling Green State University*.

Effects of cockpit vertical acceleration on pilot tracking performance. ROBERT O. BESCO, *North American Aviation*.

Work team effectiveness as a function of mechanical degradation of the intrateam communication system. J. S. KIDD, *Ohio State University*.

Sources of vigilance decrement in a complex task. LAWRENCE R. BOULTER AND JACK A. ADAMS, *University of Illinois*.

Anticipation in continuous tracking. LYLE R. CREAMER AND JACK A. ADAMS, *University of Illinois*.

Life history antecedents of volunteers and nonvolunteers for an AFROTC program. WILLIAM A. OWENS

AND WILLIAM E. WILLIAMS, *Purdue University and United States Air Force.*

Books as teaching machines: Some data. H. OLIVER HOLT AND JOSEPH HAMMOCK, *Bell Telephone Laboratories.*

### Animal Motivation

JOHN K. BARE, *Carleton College, Chairman*

The relationship between deprivation weight loss and two activity measures. F. ROBERT TREICHLER, *Ohio State University.*

Wheel activity in rats grouped by periods of repeated confinement. JAMES W. CLARK AND EDWARD NEWBURY, *University of Kentucky.*

Extinction under nine different deprivation levels. JOHN W. COTTON AND WINFRED F. HILL, *University of California, Santa Barbara, and Northwestern University.*

Effectiveness of drive and preceding reinforcements on reaction potential after numerous extinctions and reconditioning. RAYMOND C. MILES, *University of Alberta.*

Habit acquisition and reversal in a T maze as a function of drive strength. JOAN H. CANTOR, *University of Iowa.*

Running speed as a function of shifts in concentration of sucrose incentive between pretraining and training. KENNETH P. GOODRICH AND HERBERT ZARETSKY, *University of Pennsylvania.*

### Higher Processes II

JACK RICHARDSON, *Harpur College, Chairman*

Conditions and tests for mediation. JAMES G. MARTIN, *Kent State University.*

Strategies in concept attainment. JOE L. BYERS AND HERBERT J. KLAUSMEIER, *University of Wisconsin.*

The effects of contiguous grouping and the percentage of relevant cues upon concept identification. MARGARET JEAN PETERSON, *Indiana University.*

An investigation of the relationship between concept formation ability and reading achievement in children at three development levels. JEAN S. BRAUN, *Lafayette Clinic.*

Paired-associate learning as a function of categorical similarity and cue reduction in normal and mentally retarded children. IRA J. SEMLER AND IRA ISCOE, *Cedar Rapids Public Schools and Harvard University.*

### Early Experience

STANLEY C. RATNER, *Michigan State University, Chairman*

Behavioral aftereffects of early trauma in mice: Critical periods of traumatization. NORMAN D.

HENDERSON AND JAN H. BRUELL, *Oberlin College and Western Reserve University.*

The diadic development of emotional behavior in mother and young. PAUL V. CARLSON AND MARK W. STEPHENS, *Purdue University.*

Some effects of multiple mothering and maternal emotionality level on offspring growth and development. DONALD R. OTTINGER AND MARK W. STEPHENS, *Indiana University Medical Center and Purdue University.*

Cold stress as a factor of early handling experience affecting body weight. WILLIAM D. KALBERER, *Purdue University.*

Effects of infantile stimulation and age upon behavior. VICTOR H. DENENBERG AND S. A. SMITH, *Purdue University.*

Modification of adult emotionality through early social experience. JOHN R. C. MORTON AND VICTOR H. DENENBERG, *Purdue University.*

Effects of fostering on survival and weight gain in the rat. LEE J. GROTA, *Purdue University.*

### Psychodiagnostic Testing

NORMAN A. MILGRAM, *Nebraska Psychiatric Institute, Chairman*

The validity of Wechsler's signs of mental deficiency. LUCIANO L'ABATE AND MILTON KENTES, *Washington University School of Medicine and Project, Incorporated.*

Prognostic factors in elderly patients. N. CHARLES BOURESTOM, ROBERT J. WOLFF, AND HOWARD R. DAVIS, *Mental Health Institute, Independence, Iowa, and Minnesota Follow-up Study.*

The effects of epileptic seizures on intellectual functioning. HALLGRIM KLOVE, *Indiana University Medical Center.*

The presence of laterality of cerebral damage predicted from a brief aphasia test. LAWRENCE WHEELER AND RALPH M. REITAN, *Indiana University.*

Effects of lateralized cerebral dysfunction in patients with longstanding brain damage on Wechsler-Bellevue variables and Halsted impairment index. KATHLEEN B. FITZHUGH, *New Castle State Hospital.*

Sensorimotor deficits of brain damaged subjects in relation to intellectual level. LOREN C. FITZHUGH, *New Castle State Hospital.*

### Human Motive-Incentive Conditions

GORDON N. CANTOR, *University of Iowa, Chairman*

Effectiveness of paired verbal reinforcements as a function of task complexity. WILLIAM J. MEYER AND STUART I. OFFENBACH, *University of Pittsburgh.*

Incubation: Effect of awareness on immediate vs. delayed recall of words followed by shock. PHILIP E. FREEDMAN AND I. E. FARBER, *University of Iowa*.

Effect of minimal social reinforcement on interviewee behavior. FREDERICK H. KANFER AND JOHN F. MCBREATHY, *Purdue University*.

The conditioning of verbal behavior as a function of the need for social approval. DOUGLAS P. CROWNE AND BONNIE R. STRICKLAND, *Ohio State University*.

Incidental learning in children under varying levels of incentive set. BEVERLEY G. FICKE AND DONALD H. KAUSLER, *St. Louis University*.

Effects of change in drive on stimulus generalization. ARTHUR R. PLATZ AND ROBERT B. ZAJONC, *University of Michigan*.

An investigation of ego involvement using a transitivity test. EVA D. FERGUSON, *Craig House, Pittsburgh, Pennsylvania*.

### Mathematical Behavior Models II

DAVID LABERGE, *University of Minnesota*, Chairman

The effect of skill and chance orientations on probability preferences. LAWRENCE W. LITTIG, *University of Buffalo*.

Boredom: A vitiating variable in decision experiments. PAUL SLOVIC, SARAH LICHTENSTEIN, AND WARD EDWARDS, *University of Michigan*.

Effects of risk avoidance on category width and decision certainty. SIDNEY ROSEN AND MARGARET F. HOFFMAN, *Marquette University*.

Prediction for some stochastic events: A regret equalization model. MAX S. SCHOEFFLER, *Bell Telephone Laboratories*.

Sequential predictions with variable stakes. MARILYN TANNENBAUM AND WARD EDWARDS, *University of Michigan*.

Probability learning with displays, instructions, and payoffs variant. WARD EDWARDS AND MARILYN TANNENBAUM, *University of Michigan*.

A comparison of human performance and an ideal strategy in a maintenance game situation. MILTON A. GRODSKY, GIRARD W. LEVY, DAVID L. GLAZER, AND ROBERT D. SORKIN, *Martin Company and University of Michigan*.

### Clinical Psychology

LOREN J. CHAPMAN, *University of Kentucky*, Chairman

Silence as a form of resistance. GARY B. GOLDBERG AND FRANK AULD, JR., *Wayne State University*.

Variables related to duration of individual psychotherapy. A. BARCLAY AND ARNOLD H. HILDEN, *St. Louis University*.

Stimulus generalization measures of impulsivity in murderers, thieves, and guards. GERALD ROSENBAUM, *Wayne State University*.

Performance of mental deficients on a simple vigilance task. J. ROGER WARE, ROBERT A. BAKER, JR., AND RAYMOND R. SIPOWICZ, *United States Army Armor Human Research Unit*.

### Human Conditioning II

MARTIN R. BARON, *Kent State University*, Chairman

Cognitive factors in heart rate conditioning. BISHWA B. CHATTERJEE AND CHARLES W. ERIKSEN, *University of Michigan and University of Illinois*.

Gastrointestinal reactions during a noise avoidance task. R. C. DAVIS AND FRANCES BERRY, *Indiana University*.

Effects of omitted vs. delayed UCS on classical eyelid conditioning under partial reinforcement. JOHN W. MOORE AND ISIDORE GORMEZANO, *Indiana University*.

Effects of instructions on the extinction and recovery of an avoidance response. RICHARD H. LINDLEY AND K. E. MOYER, *Carnegie Institute of Technology*.

### SYMPOSIA

#### Models and Organic Correlates of Psychological Processes

RONALD H. FORGUS, *Lake Forest College*, Chairman

#### Participants:

HAROLD W. HAKE, *University of Illinois*. Application of information theory to perception.

KENNETH R. LAUGHERY, *Carnegie Institute of Technology*. The simulation of problem solving behavior.

ROGER W. RUSSELL, *Indiana University*. Neurochemical lesions and behavior.

JOHN GAITO, *Lake Forest College*. A biochemical conceptualization of learning and memory.

Discussants: JOHN A. HARVEY, *University of Chicago*; AND LEE GREGG, *Carnegie Institute of Technology*.

#### Psychological Inferences Concerning Organic Brain Damage

WESLEY C. BECKER, *University of Illinois*, Chairman

#### Participants:

HALLGRIM KLOVE, *Indiana University Medical Center*. Tests and methods used in neuropsychological evaluation.

RALPH M. REITAN, *Indiana University Medical Center*. Inferences in individual patients based on neuropsychological data.

CLETUS J. BURKE, *Indiana University*. Discriminant functions as a diagnostic technique.

LAWRENCE WHEELER, *Indiana University*. An application of discriminant functions to the problem of predicting brain damage using behavioral variables. Discussant: WARD C. HALSTEAD, *University of Chicago*.

#### Concepts in the Experimental Study of Human Motivation

R. B. CATTELL, *University of Illinois*, Chairman

##### Participants:

CHARLES VEROFF, *University of Michigan*. Assessment of motives through fantasy.

DAVID CONNOR, *University of Otago*. Motivation and school achievement.

NORMAN GARMEZV, *University of Minnesota*. Responses of schizophrenic subjects to motivational cues.

ARTHUR SWENEY, *University of Illinois*. The factored motivation space of children.

Discussants: WILLARD KERR, *Illinois Institute of Technology*; AND JULIAN ROTTER, *Ohio State University*.

#### Current Research on Experimental Gastric Ulcer

JEROME D. PAUKER, *Malcolm Bliss Mental Health Center*, Chairman

##### Participants:

DAVID A. BRODIE, *Merck Institute for Therapeutic Research*. Review of the literature on restraint induced ulcers.

HARLEY M. HANSON, *Merck Institute for Therapeutic Research*. A study of the factors involved in the production of restraint induced ulcers.

ROBERT ADER, *University of Rochester School of Medicine*. Plasma pepsinogen and gastric lesions in the rat.

JACOB O. SINES, *Washington University School of Medicine*. Behavioral correlates of genetically enhanced susceptibility to gastric lesions.

Discussants: I. ARTHUR MIRSKY, *University of Pittsburgh*; AND HOWARD F. HUNT, *University of Chicago*.

#### Action Training Techniques in Industry

RAYMOND J. CORSINI, *Daniel D. Howard Associates*, Chairman

##### Participants:

T. W. FRANK, *Beltone Hearing Aid Company*. Improving liaison effectiveness in industry.

WILLIAM REINHARDT, *Rand-McNally Publishing Company*. Group dynamics and role playing.

WALLACE LONERGAN, *University of Chicago*. Reducing interpersonal conflicts in industry.

L. RICHARD HOFFMAN, *University of Michigan*. Matching methods and objectives.

Discussants: IRWIN SWARTZBERG, *Realemon-Puritan Company*; AND PHILIP ASH, *Inland Steel Company*.

#### The Role of the Internship in Predoctoral Clinical Training

HAROLD BASOWITZ, *National Institute of Mental Health*, Chairman

Participants: SOL L. GARFIELD, *Nebraska Psychiatric Institute*; ALBERT I. RABIN, *Michigan State University*; JOSEPH E. BREWER, *Wichita Guidance Center*; AND WILLIAM SCHOFIELD, *University of Minnesota*.

#### SPECIAL MEETING

Workshop for Officers or Representatives of State Associations. Sponsored by the APA Board of Professional Affairs. LOUIS L. MCQUITTY, Chairman.

#### PSI CHI

##### Paper Session

GEORGE S. SPEER, *Illinois Institute of Technology*, Chairman

Effects of CS-UCS interval on rate and asymptotic level of eyelid conditioning. RICHARD WIEHE, *Indiana University*.

Effect of UCS-alone presentations in eyelid conditioning. EDWARD DEAUX, *Indiana University*.

Maze learning and spontaneous alternations in earthworm (*Lumbricus terrestris*). PHYLLIS M. KASPER, *University of Wisconsin-Milwaukee*.

An evaluation of blocking in motor conflict. MARVIN A. POWELL, *University of Wisconsin-Milwaukee*.

The effects of failure and success in a concept formation task. JOHN T. PRITCHARD, *University of Wisconsin-Milwaukee*.

##### Invited Address

BENTON J. UNDERWOOD, *Northwestern University*. One-Trail Learning. WILLIAM K. ESTES, *Indiana University*, Chairman.

#### PRESIDENTIAL ADDRESS

MARION E. BUNCH, *Washington University*. Experimental Extinction in Learning and Memory. ROSS STAGNER, *Wayne State University*, Chairman.



PROCEEDINGS OF THE THIRTY-SECOND ANNUAL MEETING  
OF THE

EASTERN PSYCHOLOGICAL ASSOCIATION

CARL H. RUSH, Secretary

*Ted Bates and Company*

THE thirty-second Annual Meeting of the Eastern Psychological Association was held on April 7-8, 1961 at the Bellevue Stratford and Sylvania Hotels in Philadelphia, Pennsylvania. 1,950 persons registered at the meeting of whom 1,110 were members of EPA, 285 were new members who joined the association at the meeting, and 555 were guests. The present membership of EPA totals 3,360.

Norman Gekoski was in charge of local arrangements, assisted by Leonard Wollack, James Adams, Karl Geisinger, Neil Miller, and Robert Cairns. The Program Committee, consisting of Raymond Katzell, Chairman, David Ehrenfreund, and Henry David, scheduled 276 papers (presented in 54 sessions), 10 symposia, 5 special meetings, and 1 film. S. S. Stevens presented the annual Presidential Address entitled "The Nomological Quest."

Among the significant items transacted at the Annual Business Meeting and at the Board of Directors Meeting were the following:

1. George A. Miller was elected President (1961-62); James Deese and James Gibson were elected to the Board of Directors (1961-64); E. J. Shoben was elected to fill George Miller's unexpired term on the Board of Directors (1961-63).

2. The following appointments were made: Committee on Local Arrangements, Arthur Siegel, Chairman; Program Committee, John Kennedy to serve with Henry David, Chairman, and Raymond Katzell; Elections Committee, B. F. Skinner to serve with S. S. Stevens; Membership Committee, Kenneth Berrien to serve with Joseph Bobbitt; Auditing Committee, Max Siegel and Wayne Dennis.

3. Nine non-APA members were approved for membership, and one was rejected.

4. It was announced that the 1962 meeting would be held at the Chalfonte-Haddon Hall in Atlantic City on April 27-28.

5. The following actions of the Board of Directors were announced:

- a. The Board instructed the Program Committee to use Thursday evening for programing and to schedule all symposia on Thursday and Friday evenings, leaving Friday and Saturday for paper sessions exclusively.

- b. The Board instructed the Program Committee to change the "Call for Papers" regarding symposia. In the future the person submitting a symposium pro-

posal must include an abstract of papers to be given by each participant plus an integrated summary to be given by the Chairman. Rules for abstracts and consideration by the Program Committee will be the same as in evaluating individual papers.

- c. The Board passed a motion on the length of papers. In the future each paper will be allotted 15 minutes for reading and discussion. Authors will be urged to allow a few minutes for discussion within the 15 minutes allotted.

- d. The Board instructed the Secretary to take the necessary steps to incorporate the association.

- e. The Board voted to empower the Secretary to grant continued membership to EPA members who move out of the EPA territory, such permission to be granted upon written request from the member.

- f. The Board voted to establish a new class of membership to be called Life Member with a waiver of dues. The Secretary will elect persons who request such status and who have reached age 65.

- g. The Board voted to establish the office of Historian, to be a nonvoting member of the Board and appointed by the Board. Gorham Lane was appointed to this office for a 5-year term.

- h. The Board voted the following administrative changes: The office of Secretary will be changed to that of Executive Secretary and this person will be empowered to disburse as well as to collect funds for the association. This will be an appointive office, the appointment being made by the Board of Directors. The association will continue to have an elected Treasurer, but his functions will be those of a budget officer, not a disbursing officer as is now the case. In addition, the association will retain a firm of professional auditors to oversee the financial transactions of the association.

- i. All of the decisions in Paragraph h above require Bylaw changes. The Board instructed the Secretary to prepare the necessary Bylaw revisions and submit them to the membership for approval in a September mailing this year.

- j. The Board voted to endorse the following statements of basic policy:

The Board is cognizant of the importance of the Placement function during the meeting and sanctions its continuance.

EPA stands behind the Program Committee in its attempts to maintain high standards. Quality should be the

goal. In planning a program it is felt that errors of omission are not as detrimental as errors of commission. Throughout the history of EPA it has been implicit that every member has a right to present a paper. However, the Association can no longer continue this policy and must amend it by stating that every member has a right to present a *good* paper.

k. The Board voted to express its gratitude for the excellent report submitted by the Structure and Function Committee under Gorham Lane's chairmanship. The committee was discharged with thanks.

l. The Board authorized the Treasurer to invest up to 75% of the association's cash balance in short-term Treasury Notes.

6. President Stevens introduced the Board's candidate for Secretary, Marvin Iverson. Iverson was elected by the membership for a 3-year term (1961-64).

7. Under new business, the following resolution was introduced and adopted by the membership:

Resolved that the EPA express its appreciation and gratitude to Carl Rush and his wife Ruth for their faithful service and untiring efforts in running the affairs of the Association during the past three years.

8. An interim report and a proposed budget for 1961-62 were presented by the Treasurer, Martin Bruce. The Treasurer's audited financial statement for the fiscal year 1960-61 follows:

FINANCIAL STATEMENT AS OF MAY 1, 1961  
FOR THE FISCAL YEAR 1960-1961

INCOME:

Membership Fees .....	\$ 5,984.00
Guest Fees .....	1,110.00
Exhibitor Fees .....	2,905.00
Sale of Programs .....	147.55
Return on Investments .....	52.83
<b>Total Income .....</b>	<b>\$10,199.38</b>

EXPENDITURES:

Publication of Proceedings .....	\$ 490.00
Secretary's Honorarium .....	700.00
Office of Secretary—Labor .....	1,521.00
Office of Secretary—Supplies and Equipment .....	35.00
Bonding of Secretary .....	12.50
Postage .....	382.68
Printing, Maintenance of Member File .....	2,528.53
Annual Meeting Expenses: .....	2,123.74
Exhibits .....	\$ 650.49
Placement Service .....	252.74
Registration .....	314.17
Press .....	41.03
Audio-Visual Aids .....	249.60
General Expenses .....	615.71
Program Committee .....	212.98
Structure and Function Committee .....	163.35
EPA History Project .....	20.00
<b>Total Expenditures .....</b>	<b>\$ 8,189.78</b>

Surplus for 1960-61 .....	\$2,009.60
Cash Balance as of May 1, 1960 .....	5,733.42
<b>Total Net Worth .....</b>	<b>\$ 7,743.02</b>
<b>CASH BALANCE as of May 1, 1961 .....</b>	<b>\$4,760.18</b>
<b>INVESTMENTS (Treasury Bills) .....</b>	<b>2,982.84</b>
<b>TOTAL .....</b>	<b>\$ 7,743.02</b>

We, the Auditing Committee for the year 1960-61, have examined the records in connection with this statement and find it to be a true and correct account.

Signed:  
MAX SIEGEL  
WAYNE DENNIS

## PROGRAM

## PAPER SESSIONS

## Personality I

WALTER H. WILKE, *New York University*, Chairman

The relation of perceptual and cognitive activity to the resolution of need tensions. MANNY STERNLICHT, *Yeshiva University*.

The modification of aggressive behavior through cognitive restructuring. HARRY KAUFMAN, *University of Pennsylvania*. (Sponsor, Seymour Feshbach)

The role of anxiety in social interaction. BERNARD MAUSNER and ELAINE F. SLOAN, *University of Pittsburgh*.

Dependency and the frustration-aggression hypothesis. EMANUEL K. BELLER and ANN W. HAEERLE, *Child Development Center, New York City*.

The reduction of hostility without catharsis. DANIEL MAGAZINER, *University of Pennsylvania*. (Sponsor, Seymour Feshbach)

## Social Behavior I

JOHN T. LANZETTA, *Fels Group Dynamics Center*, Chairman

An investigation of cognitive dissonance in an election year. GEORGE STRICKER, *University of Rochester*.

Human figures as mutual "anchors": Studies of social response sets. JAMES L. KUETHE, *Johns Hopkins University*.

The effects of depression on the judgment of emotional states. ABRAHAM WOLF, *University of Pennsylvania*. (Sponsor, Seymour Feshbach)

Sex differences in response set. PHILIP LANGER, *Trenton State College*.

The influence of the stimulus object upon the complementary and supplementary projection of fear. SEYMOUR FESHACH, *University of Pennsylvania*.

## Animal Brain and Learning

MELVIN LYON, *Adelphi College*, Chairman

Conditioning and extinction of a food rewarded response after selected ablations of frontal cortex in monkeys.

CHARLES M. BUTTER, MORTIMER MISHKIN, and H. ENGER ROSVOLD, *National Institute of Mental Health*.

Failure of interlimb transfer of training in corpus callosum sectioned cats. J. SECHZER, T. MEIKLE, and E. STELLAR, *University of Pennsylvania*.

Effects of striatal lesions in monkeys on a continuously reinforced operant. ROBERT L. THOMPSON, ARNOLD

HYMAN, and FRED A. METTLER, *Columbia University*.

Visual discrimination learning following medial temporal ablations. R. E. CORRELL and W. B. SCOVILLE, *Hartford Hospital, Connecticut*.

Learning and retention by monkeys with epileptogenic lesions in posterior parietal cortex. JOHN S. STAMM and ANN M. WARREN, *Institute of Living, Hartford, Connecticut*.

## Motor Performance

SHERWIN KLEIN, *Naval Air Experimental Station, Philadelphia Naval Base*, Chairman

Probability of response repetition in serial motor performance as a function of number of previous occurrences. BURTON G. ANDREAS and LOUIS MILLER, *University of Rochester*.

Incidental learning at three degrees of pursuit-rotor difficulty. PETER H. SCHILLER, *Austen Riggs Center*. (Sponsor, Richard O. Rouse)

The effects of competition on reaction time and palmar skin conductance. RUSSELL M. CHURCH, *Brown University*.

Evidence for nonspecificity of associative interference in psychomotor performance. GAYLORD D. ELLISON and EDWIN A. FLEISHMAN, *Yale University*.

Physiological responses and psychomotor performance during centrifuge simulated launches of an orbital vehicle. RANDALL M. CHAMBERS, *United States Naval Air Development Center*.

## Visual Perception

SEYMOUR WAPNER, *Clark University*, Chairman

The effect of a problem solving set on the perception of multiple targets. HARRY W. KARN and LEE W. GREGG, *Carnegie Institute of Technology*.

Brightness enhancement with microsecond light pulses. W. L. GULICK, *University of Delaware*.

Effects of the shape and degree of structure of the visual field on target detection and location. RAYMOND E. REILLY, *University of Massachusetts*. (Sponsor, Warren H. Teichner)

A psychophysical study of the gestalt proximity law of perceptual organization. THEODORE GOLD and HERMAN D. GOLDBERG, *Sperry Gyroscope Company and Hofstra College*.

The effect of sector information on pilot evaluation of collision threats. JOHN E. ROBINSON, JR., *Applied Psychology Corporation*.

### Conditioning

CYRIL FRANKS, *New Jersey Neuropsychiatric Institute*, Chairman

- The effects of stimulant drugs and placebo upon the conditioned galvanic skin response. JAMES W. PRESCOTT, *McGill University*. (Sponsor, E. G. Poser)
- Inhibiting and facilitating effects of a CS after different temporal pairings with shock. DONALD C. BUTLER, *Dartmouth College*.
- MA scale score level and the ready signal in classical conditioning. WILLIAM F. PROKASY AND FRANCIS L. WHALEY, *Pennsylvania State University*.
- The role of conditioning in the regulation of blood sugar levels: A preliminary report. ALBERT A. BRANCA, *University of Delaware*.
- Discriminative classical conditioning in dogs paralyzed by curare can later control discriminative avoidance responses in the normal state. RICHARD L. SOLOMON AND LUCILLE H. TURNER, *University of Pennsylvania and Harvard University*.

### Audition I

PAUL D. COLEMAN, *Tufts University*, Chairman

- Hearing in bats. E. G. WEVER AND JACK A. VERNON, *Princeton University*.
- Effects of temporal lobectomy on auditory discrimination in man. BRENDA MILNER, *McGill University*.
- The effect of some phenothiazine derivatives on the discrimination of auditory flutter. DONALD SHURTEFF AND DAVID MOSTOFKY, *Massachusetts Mental Health Center*. (Sponsor, Albert Di Mascio)
- The effects of chlorpromazine upon the ear and the eighth cranial nerve. DOROTHY V. SCHUETTE, *University of Delaware*. (Sponsor, W. L. Gulick)
- Learning and performance of monkeys on a sound localization task. JONATHAN G. WEGENER, *Yale University*.

### Brain Functions

ROBERT MALMO, *McGill University*, Chairman

- Spatial and temporal interaction in evoked cortical responses from the human somatosensory system. WILLIAM R. UTTAL AND LOUELLA COOK, *IBM Research Center, Yorktown Heights, New York*.
- A sensory stimulus-brain response feedback system. THOMAS MULHOLLAND, *VA Hospital, Bedford, Massachusetts*.
- Critical flicker frequency and cortical alpha: A reliability study. MAX POLLACK, ERIC KARP, GEORGE KRAUTHAMER, AND MAX FINK, *Hillside Hospital, Glen Oaks, New York*.

- Hemisphere dominance and perception of digits arriving at right and left ears. DOREEN KIMURA, *Montreal Neurological Institute*. (Sponsor, Brenda Milner)
- Operant behavior during sleep. JOHN T. HAMMACK AND ALLEN M. GRANDA, *Walter Reed Army Institute of Research*.

### Brain Mechanisms

HANS-LUKAS TEUBER, *New York University*, Chairman

- Interference with response acquisition by ether anesthesia. WALTER B. ESSMAN AND MURRAY E. JARVIK, *Albert Einstein College of Medicine*.
- Postanaesthetic discrimination behavior in the rat. MURIEL H. STERN AND HENRY GALLAY, *McGill University and Jewish General Hospital, Montreal, Canada*.
- Two selective deficits found to be lateralized in temporal neurosurgery patients. HERBERT LANSDELL, *National Institute of Neurological Diseases and Blindness*.
- Effects of facilitating, neutral, and inhibiting instructions on report of visual perception in brain damage. ANN LODGE, *Duke University*.
- The spiral aftereffect as a test of brain injury. AGLAIA EFSTATHIOU AND RICARDO B. MORANT, *Brandeis University*.

### Clinical

JULIUS WISHNER, *University of Pennsylvania*, Chairman

- A questionnaire describing the behavior of parents toward their children. MARVIN SIEGELMAN AND ANNE ROE, *Harvard University*.
- Cognitive test performance under LSD, placebo, and isolation. LEO GOLDBERGER, *New York University*.
- Individual differences and group response tendencies of clinicians on free and forced choice rating distributions. RITA WERTHEIMER AND LAWRENCE BENJAMIN, *Albert Einstein College of Medicine*.
- Psychological investigation of habitual abortion. ELAINE R. GRIMM, *New York Hospital-Cornell Medical Center*.
- Some factors determining the "projection" of hostility onto pictorial stimuli. ROBERT E. SINGER, *Stanford University*. (Sponsor, Seymour Feshbach)

### Educational

C. WINFIELD SCOTT, *Rutgers University*, Chairman

- A survey of measurement concepts held by elementary school teachers. NORMAN M. CHANSKY, *Ulster County Board of Cooperative Educational Services*.



Good and poor lip readers among deaf children and their ability to attain concepts. RONALD TIFFANY AND SOLIS KATES, *University of Massachusetts and Clarke School for the Deaf*.

The relationship among mental health status, academic progress, and instructors' ratings of personality in a group of underachieving students. FRANKLIN H. GOLDBERG, *Reading Institute, New York University*.

Motivational variables in second-language acquisition. ROBERT C. GARDNER, *McGill University*. (Sponsor, Wallace E. Lambert)

An experimental investigation of a study program at the Bernard M. Baruch School of Business and Public Administration, City College of New York. MORTIMER R. FEINBERG, LOUIS LONG, AND VIOLA ROSENHECK, *City College of New York*.

### Decision Making

JOHN L. KENNEDY, *Princeton University*, Chairman

Cooperation and competition in a simulated two-person non-zero-sum game. VELLO SERMAT, *Yale University*. (Sponsor, Frank A. Logan)

Behavior in two, three-person, zero-sum games. BERNHARDT LIEBERMAN, *Harvard University*.

Monetary incentive and range of payoffs as determiners of risk taking. LEONARD KATZ, *University of Massachusetts*. (Sponsor, Jerome L. Myers)

Information cost, amount of payoff, and time limitations as determinants of information seeking in decision making. JOHN T. LANZETTA AND VERA T. KANAREFF, *Fels Group Dynamics Center*.

Optimal utilization of information in estimating proportions. RAYMOND A. WIESEN, EMIR H. SHUFORD, AND H. EDWARD MASSENGILL, *University of North Carolina*.

### Perception

LAWRENCE KARLIN, *New York University*, Chairman

A study of the amplitude of a differentiated human timing response. JULIAN I. TABER, *University of Pittsburgh*.

The effects of angularity of contour on critical flicker frequency. IRWIN M. SPIGEL, *Temple University*. (Sponsor, H. C. Hamilton)

The effect of familiarity and regularity of the shape of the texture elements of a surface on the perception of the slant of the surface. HOWARD R. FLOCK, *Cornell University*. (Sponsor, James J. Gibson)

Acuity for the perception of being looked at. ANNE G. DANIELSON AND JAMES J. GIBSON, *Cornell University*.

Choice reaction time as influenced by the probability of occurrence of a stimulus. OCIO R. HOLSINGER,

*Johns Hopkins University*. (Sponsor, G. H. Mowbray)

### Stimulus Generalization

GREGORY A. KIMBLE, *Duke University*, Chairman

Extinction and stimulus generalization: A study of the generalization of inhibition. HARRY I. KALISH AND AUDREY B. HABER, *Adelphi College*.

Semantic generalization between languages. ROBERT M. OLTON, *McGill University* (Sponsor, W. E. Lambert)

Stimulus generalization: Its relation to discrimination, anxiety, and perphenazine. ALBERTO DI MASCO, *Massachusetts Mental Health Center*.

Conditional discrimination and positive and negative generalization gradients. C. ALAN BONEAU, *Duke University*.

Stimulus generalization in the learning of classifications. ROGER N. SHEPARD AND JIH-JIE CHANG, *Bell Telephone Laboratories*.

### Brain Stimulation

JOHN P. FLYNN, *Yale University*, Chairman

The effect of subcortical stimulation on visual discrimination learning in the rat. INA SAMUELS, *University of Michigan*. (Sponsor, Edward L. Walker)

Stimulus bound eating behavior and hunger controlled self-stimulation from the same locus in the hypothalamus. DAVID L. MARGULES, *University of Michigan*. (Sponsor, James Olds)

Self-stimulation preference as an index of the relative reinforcing strength of different brain sites. LARRY STEIN AND JOSEPH SEIFTER, *Wyeth Laboratories*.

Slowing of heart rate following septal self-stimulation in rats. ROBERT B. MALMO, *McGill University*.

An evaluation of response rate as a measure of rewarding intracranial stimulation. WILLIAM HODOS AND ELLIOT S. VALENSTEIN, *Walter Reed Army Institute of Research*.

### Animal Learning I

BYRON A. CAMPBELL, *Princeton University*, Chairman

The role of start box cues in studies of maze running time. MATTHEW YARCZOWER, *University of Maryland*.

Sexual incentives for learning. RICHARD E. WHALEN, *Yale University*.

Conditioned suppression as a function of the CS-US interval. GEORGE A. CICALA, *Princeton University*.

The effects of deprivation schedule and reward magnitude on performance during acquisition and extinction. WILLIAM B. PAVLIK, *Rutgers University*.

Overlearning and reversal of a simple position discrimination. M. R. D'AMATO, *New York University*.

### Motivation I

- FRANK W. FINGER, *University of Virginia*, Chairman
- Exploration phenomena and the drive reduction hypothesis. ROBERT E. LANA, *American University*. (Sponsor, David J. King)
- Changes in bar pressing performance and heart rate in the sleep deprived rat. LAURENCE D. RUST, *McGill University*. (Sponsor, Robert B. Malmö)
- Acclimatization, habituation, and motivation in the cold. EDWARD YOUNGLING AND WARREN H. TEICHNER, *University of Massachusetts*.
- The role of the CS and of apparatus cues in the measurement of acquired fear. WALLACE R. McALLISTER AND DOROTHY E. McALLISTER, *Syracuse University*.
- The rat's adjustment to adurnal feeding cycles. ROBERT C. BOLLES AND JOHN DE LORGE, *Hollins College*.

### Human Learning I

- IRVIN ROCK, *Yeshiva University*, Chairman
- The significance of personal pre-experimental response preferences for experimental learning. ALVIN BERNSTEIN, *VA Hospital, Montrose, New York*. (Sponsor, Seymour G. Klebanoff)
- The effects of electrical shock on the acquisition of a verbal expectancy. EDWARD E. EDDOWES, *University of Florida*.
- A comparison of two mathematical models for the acquisition of partially reinforced choice behavior. ROBERT RADLOW, *Pennsylvania State University*.
- Set and associative inhibition. GERALD TOLCHIN AND JOHN CERASO, *Yeshiva University*.
- Role of contiguity in incidental learning. JEROME SILLER, *New York University*.
- Transition probability effects in variable pattern anagram problem solving. HARRY BEILIN AND RHEBA HORN, *Brooklyn College*.

### Schizophrenia

- BENJAMIN WOLMAN, *Queens College*, Chairman
- Concept attainment of schizophrenics on stimulus materials involving interpersonal disapproval. DAVID J. MORIARTY, *University of Massachusetts*. (Sponsor, Solis L. Kates)
- Is meaningful research being done in the area of schizophrenia? JAMES L. FRAMO AND IVAN BOSZORMENYI-NAGY, *Eastern Pennsylvania Psychiatric Institute, Philadelphia*.

The prognostic value of nonspecific verbal reinforcement of Rorschach responses in a group of schizophrenics. MAURICE PORTNOY AND SOL B. HECKELMAN, *Brooklyn State Hospital*.

A comparison of response set tendencies in a normal and schizophrenic sample. LEONARD SOLOMON AND EDWARD KLEIN, *Boston University and VA Hospital, Montrose, New York*. (Sponsor, Seymour G. Klebanoff)

Reaction time and EEG behavioral activation in schizophrenics. JOHN C. TOWNSEND AND PAUL FEDIO, *Catholic University*.

### Verbal Behavior

- GREGORY RAZRAN, *Queens College*, Chairman
- An experimental study to investigate the phenomenon of perceptual set through the recognition of word stimuli. WILL A. DICKHUTH, *Springfield College*. (Sponsor, Seth Arsenian)
- The influence of degree of practice on speed of response in a competitive verbal task. RICHARD O. ROUSE AND JAMES B. MARS, *Williams College and Cornell University*.
- Immediate memory and amount of information. FRED SCHWARTZ, *Austen Riggs Center*.
- The effect of order of statistical approximation to English on the prediction of verbal responses. KURT SALZINGER, STEPHANIE PISONI, AND RICHARD S. FELDMAN, *New York State Department of Mental Hygiene and Columbia University*.
- Semantic satiation in an addition task. LEON A. JAKOBOVITS, *McGill University*. (Sponsor, Wallace E. Lambert)
- Repetition in paired-associate learning. BENNET B. MURDOCK, JR., *University of Vermont*.

### Engineering Psychology

- ARTHUR I. SIEGEL, *Applied Psychological Services*, Chairman
- Target velocity, exposure time, and anticipatory tracking time as determinants of dynamic visual acuity. EDWIN H. ELKIN, *Tufts University*. (Sponsor, Philip B. Sampson)
- Reinforced operant observing as a "machine assist" to human performance. HAROLD C. STRASEL, *University of Pittsburgh*. (Sponsor, Robert Glaser)
- A study of the perceptual characteristics and training potential of an external visual display (F-151) associated with the F-100A flight simulator. MARK G. PFEIFFER, W. CRAWFORD CLARK, AND JAMES W. DANAHER, *Courtney and Company, Philadelphia, Pennsylvania*.

Aircraft attitude information as conveyed by exterior paint patterns. ERNST P. THAL-LARSEN, *Applied Psychology Corporation*. (Sponsor, Robert B. Sleight)

Effect of exterior color coding on aircraft visibility. RICHARD M. BEAZLEY, *Applied Psychology Corporation*. (Sponsor, John E. Robinson, Jr.)

Identifiable light-flash patterns for category communication. KENNETH G. COOK, *Applied Psychology Corporation*.

### Vision

DOROTHEA J. HURVICH, *New York University*, Chairman

On responses to equally bright stimuli of unequal luminance. JUDITH WHEELER ONLEY, *University of Rochester*.

Spatially localized changes in the detectability of a retinally stabilized contour. LEO GANZ, *Brown University*.

Differential sensitivity of the central retina to intermittent white light. TAPAS K. SEN, *Johns Hopkins University*. (Sponsor, G. H. Mowbray)

New evidence on the relation of ocular tremor to figural aftereffects. ROBERT SEKULER AND RICHARD HELD, *Brown University and Brandeis University*.

Stabilized retinal images: The effect of concurrent visual stimulation. HARRY B. COHEN, *McGill University*. (Sponsor, P. M. Milner)

Some characteristics of photically evoked responses in the human cortex. DONALD I. TEPAS AND JOHN C. ARMINGTON, *Walter Reed Army Institute of Research*.

### Physiological I

CARL PFAFFMANN, *Brown University*, Chairman

Behavioral thermoregulation. BERNARD WEISS AND VICTOR G. LATIES, *Johns Hopkins University*.

Physiological response patterns and time estimation. NEAL M. BURNS, JAMES R. MOYES, AND EDWARD C. GIFFORD, *United States Naval Air Material Center, Philadelphia, Pennsylvania, and State University of New York*.

Performance of alternation- and delayed response-type tasks by normal and limbic system operated monkeys. J. ORBACH, *Michael Reese Hospital*.

The relationship of handedness, familial background, and laterality to punctate pressure sensitivity. SIDNEY WEINSTEIN AND EUGENE A. SERSEN, *Albert Einstein College of Medicine*.

Activation correlates of performance on a simple repetitive mental task. PETER MACNEILAGE, *Allan Memorial Institute, McGill University*. (Sponsor, Robert B. Malmo)

Hormones and neurosis: A psychological study of thyroid deficiency. MARTHA SCHON, ARTHUR M. SUTHERLAND, AND RULON W. RAWSON, *Memorial Sloan Kettering Cancer Center and Department of Clinical Investigation, New York*.

### Evaluation and Measurement

SAMUEL J. MESSICK, *Educational Testing Service*, Chairman

Extending latent class solutions to other variables. W. A. GIBSON, *Human Factors Research Branch, Department of the Army*.

A factor analytic study of some measures of impulsiveness and anxiety. ERNEST S. BARRATT, *Texas Christian University*.

Evidence for sex-linked inheritance of spatial visualization. RICHARD E. STAFFORD, *Pennsylvania State University*.

Clergymen's conceptions of what it means to be religious. JACK SHAND, *Gettysburg College*.

A study of differential scoring procedures in a critical thinking test. E. VAUGHN GULO, *University of Maine*. (Sponsor, Alan Baron)

The effects of varying time limits on test validity. L. M. KENDALL, *Cornell University*. (Sponsor, T. A. Ryan)

### Reinforcement

JOSEPH NOTTERMAN, *Princeton University*, Chairman

The role of the "neutral" cue in secondary reinforcement. MICHAEL P. ANDRONICO, *Rutgers University*. (Sponsor, Donald G. Forgays)

Behavior maintained by intermittent conditioned reinforcement with an added stimulus. J. ZIMMERMAN, *Indiana University Medical Center*. (Sponsor, C. B. Ferster)

Instrumental licking behavior, partial reinforcement, and the incentive value of a reward. STEWART H. HULSE AND W. EDWARD BACON, *Johns Hopkins University*.

Relations between acquired reinforcing and discriminative properties of a stimulus. THOMAS K. LANDAUER, *Dartmouth College*.

The relative reinforcement values of food and intracranial stimulation. J. W. KLING AND YOICHI MATSUMIYA, *Brown University*.

Reinforcement as a function of instructional set. DONALD G. FORGAYS, *Rutgers University*.

### Self-Evaluation

JAMES DIGGORY, *University of Pennsylvania*, Chairman

Motivation of chronic schizophrenics by information about their abilities in a group situation. ARMIN

- LOEB, *VA Hospital, Coatesville, Pennsylvania*. (Sponsor, James C. Diggory)
- Changes in TAT death imagery as a function of success and failure. DOREEN ZINN ROTHMAN, *University of Pennsylvania*. (Sponsor, James C. Diggory)
- Partner choice as a function of personal liking, perceived ability, and value of prize. JOHN W. WHITMYRE AND DAVID COHEN, *VA Hospital, Coatesville, Pennsylvania*.
- Power to succeed, value of the goal, and estimated probability of success in intact and disabled children. SYLVIA FARNHAM, *University of Pennsylvania*. (Sponsor, James C. Diggory)
- Level of aspiration and performance in relation to goal, achievement, and information about performance. HENRY C. MORLOCK, JR., *University of Pennsylvania*. (Sponsor, James C. Diggory)
- Valence, expectancy, and dissonance reduction in the prediction of achievement striving. MARVIN ROSEN, *University of Pennsylvania*. (Sponsor, James C. Diggory)

### Projective Techniques

ABRAHAM ZEICHNER, *Connecticut State Department of Mental Health*, Chairman

- The prediction of some aspects of marital compatibility by means of the Rorschach test. BARRY BRICKLIN AND SOPHIE G. GOTTLIEB, *Jefferson Medical College and Teacher's College*.
- Accuracy of three Rorschach test techniques and the Hewson ratios in detecting brain pathology. ZYGMUNT A. PIOTROWSKI, *Jefferson Medical College*.
- Rorschach developmental level and the MMPI as measures of severity of psychological disturbance. MARVIN R. GOLDFRIED, *University of Buffalo*.
- Scoring for fear of failure: The hostile press system. ROBERT C. BIRNEY, HARVEY BURDICK, AND RICHARD C. TEEVAN, *Amherst College, Smith College, and Bucknell University*.
- Rorschach findings in four cases of paternal incest. IRVING B. WEINER, *University of Rochester Medical Center*.

### Cognitive Processes

ULRIC NEISSER, *Brandeis University*, Chairman

- Mechanics of concept work: Concept size, example sign, and information order. MURRAY GLANZER AND JAN-ELLEN HUTTENLOCHER, *University of Maryland*.
- Semantic satiation among bilinguals. WALLACE E. LAMBERT, *McGill University*.

The speed of reading as a function of letter context. EDWIN B. NEWMAN, *Harvard University*.

The effect of alcohol on higher order problem solving. JOHN A. CARPENTER, OMAR K. MOORE, CHARLES R. SNYDER, AND EDITH LISANSKY, *Yale University*.

The generality of the "conditioning axiom" in human binary prediction. PETER L. DERKS, *College of William and Mary*. (Sponsor, Stanley B. Williams)

### Avoidance Behavior I

CHARLES B. FERSTER, *Indiana University Medical Center*, Chairman

Effects of CS intensity and quality in avoidance conditioning. ARLO K. MYERS, *Roscoe B. Jackson Memorial Laboratory*.

The effect of several shock patterns on the acquisition of the secondary drive of fear. ROBERT FROMER, *Yale University*. (Sponsor, Neal E. Miller)

Simple and differential conditioning in curarized dogs as a function of shock intensity. J. R. BARTLETT AND A. H. BLACK, *McMaster University*.

Effects of variable versus fixed CS-US intervals upon avoidance learning. HOWARD I. LOW AND LORRAINE A. LOW, *State University of Iowa and VA Hospital, Iowa City, Iowa*.

A demonstration of an avoidance schedule preference. THOM VERHAVE, *Lilly Research Laboratories*. (Sponsor, Murray Sidman)

### Sensory Processes

JOHN A. SWETS, *Massachusetts Institute of Technology*, Chairman

Warmth threshold for three-centimeter microwaves. DOROTHY MURGATROYD, JAMES D. HARDY, AND EDWIN HENDLER, *Wagner College, University of Pennsylvania, Naval Air Acceleration Laboratory, Johnsville, Pennsylvania, and United States Naval Air Materiel Center, Philadelphia, Pennsylvania*. (Sponsor, F. Denmark)

Subjective scale of force for a large muscle group. H. EISLER, *Harvard University*. (Sponsor, S. S. Stevens)

Conditioning effects of equally bright stimuli of different durations. JOSEPH F. STURR, *University of Rochester*.

The influence of cross-adaptation on thresholds for aliphatic alcohols. TRYGG ENGEN, *Brown University*.

The perception and retention of visually presented words during auditory shadowing. G. H. MOWBRAY, *Johns Hopkins University*.



## Developmental

E. KUNO BELLER, *Child Developmental Center, New York City*, Chairman

Age trends in children's incentives scaled by paired comparisons. SAM L. WITRYOL AND ELIZABETH L. ORMSBY, *University of Connecticut and Mansfield State Training School*.

The influence of patterned-light deprivation on the critical period for imprinting. HOWARD MOLTZ AND L. JAY STETTNER, *Brooklyn College*.

A study of some factors influencing the depth perception of human infants. RICHARD D. WALK, *George Washington University*.

A developmental study of the discrimination of letter-like forms. HARRY OSSER AND ELEANOR J. GIBSON, *Cornell University*.

Sex role identification in adolescents and their parents. LEONARD M. LANSKY, *Harvard University*.

## Comparative I

WILLIAM J. CARR, *Temple University*, Chairman

Turtle vestibular responses to angular acceleration with comparative data from cat and man. GEORGE H. CRAMPTON AND WALLACE J. SCHWAM, *United States Army Medical Research Laboratory*. (Sponsor, Bernard Weiss)

Strain differences, maternal effects, and heterosis. W. R. THOMPSON, E. CASPARI, AND E. NOYES, *Wesleyan University and University of Rochester*.

Spectral sensitivities of neural impulses and slow waves in the frog eye. ROBERT M. CHAPMAN, *Walter Reed Army Institute of Research*.

Some effects of early experience on later flocking behavior in ducklings. MARCUS B. WALLER, *Roscoe B. Jackson Memorial Laboratory*.

A relationship between imprinting experience and later preference of social objects. PATRICIA F. WALLER, *Roscoe B. Jackson Memorial Laboratory*.

## Audition II

RICHARD H. EHMER, *University of Bridgeport*, Chairman

The constant-ratio rule and auditory stimulus ensembles. MILTON H. HODGE, *University of Georgia*.

The effect of stimulus duration on auditory reaction time. DAVID H. RAAB, *Brooklyn College*.

Bodily position and auditory thresholds: A replication. JOHN F. CORSO, *Pennsylvania State University*.

Measurement of the musical octave sense. ANDREW G. PIKLER, *United States Naval Medical Research Laboratory, New London*. (Sponsor, J. Donald Harris)

Magnitude estimations of pitch. JACOB BECK AND WILLIAM A. SHAW, *University of Pennsylvania*.

## Operant Behavior I

ROBERT PATTON, *University of Pittsburgh*, Chairman

Response duration in discrimination training. STUART MARGULIES, *United States Naval Training Devices Center*. (Sponsor, W. N. Schoenfeld)

Fixed ratio performance under continuous experimental sessions. JACK D. FINDLEY AND NORMAN W. WEISSMAN, *University of Maryland*.

Some characteristics of discriminations acquired with and without S<sup>d</sup> responding. H. S. TERRACE, *Harvard University*. (Sponsor, R. J. Herrnstein)

Relativity of response and reinforcement frequencies in a multiple schedule. GEORGE S. REYNOLDS, *Harvard University*. (Sponsor, R. J. Herrnstein)

Constancy of response rate in a complex concurrent schedule of reinforcement. A. CHARLES CATANIA, *Harvard University*. (Sponsor, B. F. Skinner)

## Psychopharmacology I

SHERMAN ROSS, *APA Central Office*, Chairman

Behavioral and EEG effects of atropine and methyl atropine. PETER L. CARLTON AND Z. P. HOROVITZ, *Squibb Institute for Medical Research*.

Social structuring in psychopharmacological screening. RICHARD P. RUNYON AND WILLIAM J. TURNER, *C. W. Post College of Long Island University and Central Islip State Hospital*.

The reactions of placebo subjects in an LSD study. HARRIET B. LINTON AND ROBERT J. LANGS, *New York University*.

The effects of chronic administration of chlorpromazine on frustrative behavior in monkeys. JOHN J. BOITANO, *Fordham University*.

Interaction of habit strength and drug effects. DALBIR BINDRA AND JOSEPH MENDELSON, *McGill University*.

## Personnel Selection and Training

JOSEPH WEITZ, *New York University*, Chairman

Automated training of mail order clerks. A. E. HICKEY AND B. JEAN ANWYLL, *Itek Corporation, Boston, Massachusetts*.

Job analysis of air traffic controllers by interview techniques. C. GLENN DAVIS AND W. H. WALLACE, *Courtney and Company, Philadelphia, Pennsylvania*.

Predicted behaviors: Do they scale? PATRICIA CAIN SMITH, *Cornell University*.

A factor analysis of the Submarine Officer Selection Battery. JAMES W. PARKER, *United States Naval Medical Research Laboratory, New London*.

Predicting employee turnover with measures of interest and response set. THOMAS VRIS AND PHILIP H. KRIEDT, *Prudential Insurance Company*.

### Human Learning II

WALLACE R. McALLISTER, *Syracuse University*, Chairman

Interitem associative strength and immediate free and forced recall. CHARLES N. COFER, *New York University*.

The learning of a single association in one trial. RUTH F. DEICH, *New School for Social Research*. (Sponsor, Irvin Rock)

The influence of schema on one-trial learning. I. H. PAUL, *New York University*.

Role of associations in serial verbal learning. RICHARD H. LINDLEY, *Carnegie Institute of Technology*. (Sponsor, Harry W. Karn)

A comparison of anticipation and recall methods in paired-associate learning. WILLIAM F. BATTIG AND H. RAY BRACKETT, *University of Virginia*.

### Social Behavior II

LUIGI PETRULLO, *Office of Naval Research*, Chairman

The social-self-concept and heterogeneity of group opinion. RUTH C. WYLIE, *Sarah Lawrence College*.

Change in communication nets and performance. EDWIN D. LAWSON, *State University of New York*.

The effect of different persons on the heart rate of dogs. FRED L. ROYER AND W. HORSLEY GANTT, *VA Hospital, Perry Point, Maryland*.

Direction of aggression, social interaction, and person perception. MARVIN A. IVERSON, *Adelphi College*.

The operant conditioning of conversation in small groups. GILBERT LEVIN AND DAVID SHAPIRO, *Harvard Medical School*.

### Animal Brain and Sensory Processes

LARRY STEIN, *Wyeth Institute for Medical Research*, Chairman

Electrophysiologically monitored lesions in rat gustatory thalamic relay. BRUCE OAKLEY, *Brown University*. (Sponsor, Carl Pfaffmann)

Evoked potential habituation rate and sensory pattern preference as related to arbitrary and voluntary production of sensory input in the monkey. S. S. FOX, *University of Michigan*. (Sponsor, Sarnoff Mednick)

Olfactory discrimination after temporal lobe lesions in monkey. THOMAS S. BROWN, H. ENGER ROSVOLD, AND MORTIMER MISHKIN, *Catholic University and National Institute of Mental Health*.

Patterns of taste and tactile representation in the medulla of the rat. SAMUEL G. NORD, *Brown University*. (Sponsor, Carl Pfaffmann)

Electrophysiological relationships between contralateral and ipsilateral stimulation recorded from the auditory cortex of the cat. RONALD D. THOMPSON AND NATHAN B. GROSS, *Keuka College and Lehigh University*.

### Motivation II

ROBERT C. BOLLES, *Hollins College*, Chairman

Survival from terminal food deprivation as a function of previous experience. DOUGLAS K. CANDLAND AND Z. MICHAEL NAGY, *Bucknell University*.

The relationship between body weight loss and activity in the Dashiell checkerboard maze. JOHN F. HALL, *Pennsylvania State University*.

Achievement, motivation, and performance under a variety of incentive conditions. CHARLES PHILIP SMITH, *Princeton University*.

Running speed as a function of maintenance schedule and sucrose concentration. F. ROBERT BRUSH, KENNETH P. GOODRICH, ROBERT TEGHTSOONIAN, AND EUGENE H. EISMAN, *University of Pennsylvania and University of California, Riverside*.

Stimulus dependence of satiation. ALBERT WEISSMAN, *Charles Pfizer and Company*.

### Stress

WILMA A. WINNICK, *Queens College*, Chairman

A psychophysiological study on confined subjects in a closed-loop system. THOMAS D. HANNA, *United States Naval Air Material Center, Philadelphia, Pennsylvania*. (Sponsor, Neal M. Burns)

Sensory deprivation and auditory localization. DONALD W. PFAFF AND SANFORD J. FREEDMAN, *Massachusetts Mental Health Center*.

Effects of sex, anxiety, and stress in paired-associate learning with manipulated initial response strengths. MARTIN KATAHN AND SANFORD DEAN, *Syracuse University*.

Prenatal maternal stress in the rat: Its effects on emotional behavior in the offspring. CHARLES H. HOCKMAN, *Brown University*. (Sponsor, Harold Schlosberg)

The relationship of experimentally induced stress and measures of anxiety to retention. ERWIN ROSEN AND JOSEPH J. GREENBAUM, *New School for Social Research*.

**Child**

GEORGE J. WISCHNER, *University of Pittsburgh*, Chairman

Concurrent discrimination learning set formation in children. JAMES P. O'DONNELL AND GEORGE J. WISCHNER, *University of Pittsburgh*.

Anxiety and verbal behavior in children. JAMES BARNARD, SEYMOUR SARASON, AND PHILIP G. ZIMBARDO, *Yale University and New York University*.

Form and detail as determinants of similarity judgments in young children. HENRY N. RICCIUTI, FLORENCE B. RICCIUTI, AND ETTA WOODWARD, *Cornell University*.

Daydreaming and waiting ability in children. JEROME L. SINGER, *Teachers College*.

Effects of anxiety and stress on children's paired-associate learning. LEWIS P. LIPSITT, *Brown University*.

**Retardation and Disability**

LEONARD S. BLACKMAN, *Edward R. Johnstone Training and Research Center*, Chairman

Stimulus generalization in mental defectives. JEROME SMITH, *University of Connecticut*.

The effect of training on the adaptation level of the size-weight illusion with normal, deaf, and blind persons. HANS G. FURTH, *Catholic University*.

Reversal and nonreversal shifts in discrimination learning of retardates. DAVID ZEAMAN, *University of Connecticut*.

Recalls vs. trials as factors in the verbal learning of retardates. BETTY J. HOUSE, *University of Connecticut*. (Sponsor, David Zeaman)

The role of distinctive incentives in simultaneous and successive discriminations with retardates. BRYAN E. SHEPP, *University of Connecticut*.

**Animal Learning II**

MICHAEL R. D'AMATO, *New York University*, Chairman

Secondary reinforcement in rats as a function of information value versus redundancy. M. DAVID EGGER AND NEAL E. MILLER, *Yale University*.

The partial reinforcement effect as a function of goal box confinement and reinforcement schedule. DWIGHT R. KIRKPATRICK, *Rutgers University*.

(Sponsor, William F. Reynolds)  
Secondary reinforcement effects in T maze test following direct placement training. WILLIAM F. REYNOLDS, PHILIP E. FREEDMAN, AND MARTIN L. RICHTER, *Rutgers University*.

Generalization gradients of acquisition and extinction obtained after equivalent training conditions. WERNER K. HONIG, *Denison University*.

Maturation and color discrimination in the neonatal rhesus monkey. ROBERT R. ZIMMERMANN, *Cornell University*.

**Perceptual Cues**

EZRA V. SAUL, *Tufts University*, Chairman

The role of stimulus-response congruence in the effect of subliminal stimuli. FRED PINE, *New York University*.

A method for controlling the extent of partial perception in experiments on subliminal perception. LESTON L. HAVENS AND WARREN FOOTE, *Harvard Medical School*. (Sponsor, Jerome S. Bruner)

The effects of subliminal cueing on retention. GEORGE S. KLEIN, *New York University*.

Relation between perceptual properties of objects in space and one's own body. JOSEPH H. MCFARLAND, FRANK CLARKSON, HEINZ WERNER, AND SEYMOUR WAPNER, *Clark University*.

The effect of unstructured visual and auditory stimulus on hallucinogenic activity during modified sensory deprivation. THEODORE MARTON AND ERNEST A. PETERSON, *Princeton University*. (Sponsor, Jack A. Vernon)

**Industrial**

HERBERT H. MEYER, *General Electric Company*, Chairman

Toward a definition of executive success. CHARLES L. HULIN, *Cornell University*. (Sponsor, Patricia Cain Smith)

Creating conflict to improve the quality of group problem solving. L. R. HOFFMAN, E. HARBURG, AND N. R. F. MAIER, *University of Michigan*.

On prior information and creativity. RAY HYMAN, *General Electric Company*.

Two methods of analysis of a job satisfaction survey: A comparison of management action recommendations. CHARLES YOUNGBERG, RAYMOND HEDBERG, AND BRENT BAXTER, *Prudential Insurance Company*.  
One in a thousand is too many. E. T. KLEMMER, *IBM Research Center*.

**Therapy**

MAX SIEGEL, *Brooklyn College*, Chairman

Patient expectancies, symptom reduction, and aspects of the initial psychotherapeutic climate. ARNOLD P. GOLDSTEIN AND WILLIAM G. SHIPMAN, *University of Pittsburgh School of Medicine*.

Direct analysis from the viewpoint of learning theory. EDWARD J. MURRAY, *Syracuse University*.

An open-ended group therapy technique for screening and motivating patients for psychotherapy in an outpatient clinic. ANDREW S. DIBNER, ROBERT D. PALMER, AND BENJAMIN COHEN, *VA Mental Hygiene Clinic, Boston, Massachusetts.*

A laboratory method of reducing adolescent crime. ROBERT SCHWITZGEBEL AND RALPH SCHWITZGEBEL, *Brandeis University and Harvard University.* (Sponsor, David F. Ricks)

Types of therapy group members: An exploratory factor analytic study. WILLIAM RYAN AND ROBERT GEISER, *Mount Auburn Hospital and Boston University.*

### Personality II

DAVID WECHSLER, *Bellevue Psychiatric Hospital, Chairman*

The relationship of acquiescence response set to authoritarianism and dependency. MARVIN ZUCKERMAN AND BARBARA EISEN, *Brooklyn College.* (Sponsor, Wayne Dennis)

Personality characteristics associated with mood level and variability. ALDEN E. WESSMAN AND DAVID F. RICKS, *Harvard University and Brandeis University.*

The relationship between scores on the Taylor manifest anxiety scale, a depression scale, and daily reports of "trouble." MARTIN ZLOTOWSKI AND SAMUEL M. WISHIK, *University of Pittsburgh.* (Sponsor, Bernard Mausner)

The agreement of self-ratings and ratings by others and its relevance to the investigation of certain personality theories. CYRIL M. FRANKS AND EDWARD A. HOLDEN, JR., *Neuro-Psychiatric Institute, Princeton, New Jersey.*

Authoritarianism, juvenile delinquency, and socioeconomic deprivation. ROBERT G. NEEL AND RONALD W. BROOKS, *Long Island University and Jackson County Missouri Juvenile Court.*

### Avoidance Behavior II

RICHARD L. SOLOMON, *University of Pennsylvania, Chairman*

The effect of punishment on avoidance responses: The use of different stimuli for training and punishment. J. MERRILL CARLSMITH, *Harvard University.* (Sponsor, Elliot Aronson)

Conditioned suppression as a monitor of fear in the acquisition and extinction of a shuttlebox avoidance response. CHARLES J. BRIMER AND LEON J. KAMIN, *McMaster University.*

Equal aversion contours for different types of electric shock stimuli. BYRON A. CAMPBELL AND RAYMOND H. KIRBY, *Princeton University.*

The course of emotionality in the development of avoidance. HOWARD S. HOFFMAN AND MORTON FLESHLER, *Pennsylvania State University.*

Avoidance conditioning and extinction in the goldfish as a function of the CS-US interval. M. E. BITTERMAN, *Bryn Mawr College.*

### Attitudes

THURLOW R. WILSON, *University of Pittsburgh, Chairman*

The effect of cognitive tuning upon acceptance of discrepant information. SHEL FELDMAN, *Yale University.* (Sponsor, Howard Leventhal)

The role of disposition in a balanced situation. W. PETER JANICKI, *Princeton University.* (Sponsor, H. M. Schroder)

The interpretation of opinion statements as a function of recipient attitude and source prestige. MELVIN MANIS, *VA Hospital, Ann Arbor, Michigan.*

### Comparative II

WALTER C. STANLEY, *Roscoe B. Jackson Memorial Laboratory, Chairman*

A titration procedure for measuring thresholds for delay in a delayed matching test for monkeys. CARL L. SCHECKEL, *Hoffmann-La Roche, Incorporated.*

Resistance to extinction in the fish following training with continuous, variable-interval, and fixed-interval reinforcement. R. C. GONZALES AND ROCHELLE M. ESKIN, *Bryn Mawr College.*

Measurement of critical flicker frequencies in monkey. DAVID SYMMES, *Yale University School of Medicine.*

Habit reversal in the earthworm. LOIS-ELLIN G. DATTA, *Bryn Mawr College.*

Probability matching in the fish. ERIKA R. BEHREND, *Bryn Mawr College.*

### Physiological II

J. P. SCOTT, *Roscoe B. Jackson Memorial Laboratory, Chairman*

Behavioral changes after intradiencephalic chemical stimulation of cats with chronically implanted cannulae. ROBERT D. MYERS, *Johns Hopkins University.*

Human neonatal cardiac acceleration to sound: Habituation and dishabituation. A. K. BARTOSHUK, *Brown University.*



Instrumental conditioning of jugular self-infusion in the rhesus monkey. ROBERT CLARK, CHARLES R. SCHUSTER, and JOSEPH V. BRADY, *Walter Reed Army Institute of Research and University of Maryland.*

Sodium depletion and compensatory intake. JOHN L. FALK, *Harvard University.*

The anticipation of stress and serum cholesterol levels. ROBERT A. KEITH, JOHN E. PETERSON, and ALAN A. WILCOX, *Harvard School of Public Health, Peter Bent Brigham Hospital, and College of Medical Evangelists.*

### Operant Behavior II

WILLIAM W. CUMMING, *Columbia University, Chairman*

Stimulus functions in chained fixed-interval schedules. ROGER T. KELLEHER, WILLIAM FRY, and LEONARD COOK, *Smith Kline and French Laboratories.*

Stimulus probes of the fixed-ratio run. JOHN J. BOREN, *Merck Institute for Therapeutic Research.*

Punishment and preshock as determinants of bar pressing behavior. ALAN BARON and JOSEPH J. ANTONITIS, *University of Maine.*

Free operant avoidance conditioning in human subjects. ROBERT ADER and RONALD TATUM, *University of Rochester.*

Some effects of punishment on unpunished behavior. DALE M. BRETHOWER, *Harvard University.* (Sponsor, B. F. Skinner)

### Psychopharmacology II

G. R. WENDT, *University of Rochester, Chairman*

Analysis of effects of graded doses of d-amphetamine on avoidance lever pressing rates and on general activity. EDWARD BOFF and GEORGE A. HEISE, *Hoffmann-La Roche, Incorporated.*

Increased rates of responding after injections of amobarbital, pentobarbital, chlorpromazine, and d-amphetamine. C. B. FERSTER, J. B. APPEL, and R. HISS, *Indiana University Medical Center, Yale University, and Kent State University.*

Contrasting effects of methaminodiazepoxide (Librium®) and chlorpromazine on timing behavior in the rat. IRVING GELLER, *Wyeth Laboratories.*

Effects of drugs on conflict in a shuttle alley with avoidance trained prior to approach. HERBERT BARRY, III, *Yale University.*

The effect of tranquilizers on positively and negatively motivated behavior studied simultaneously in rats. OAKLEY S. RAY, *VA Research Laboratories in Neuropsychiatry, Pittsburgh, Pennsylvania.*

### SYMPOSIA

#### What Counts in Child Therapy: The Therapist? The Parent? The Process?

MILTON S. GURVITZ, *Chairman*

##### Participants:

HAIM G. GINOTT. The therapist.

ROBERT LANE. The process.

AURELIA LEVI. The parent.

#### Psychology Training at the Undergraduate and Graduate Level: The Interaction

J. MARSHALL BROWN, *Chairman*

##### Participants:

ARTHUR BRAYFIELD. Specialized training in psychology at the graduate level.

WALTER J. SMITH. Undergraduate training in a Catholic institution.

MALCOLM G. PRESTON. The graduate program in psychology in the light of current trends in the sciences.

HOWARD G. MILLER. Rational approaches to problems of teaching psychology.

#### Autoinstruction: Research and Application

CLAYTON K. BISHOP, *Chairman*

##### Participants:

GEORGE E. BRIGGS. Automatic feedback in skill training.

WILLIAM D. DEUTSCH. Automated tutors in industry.

FELIX KOPSTEIN. Adaptive teaching machines.

CLAYTON K. BISHOP. Training devices and automated tutors.

#### Organization Climate and Manpower Planning and Development

ANDREW H. SOUVERWINE, *Chairman*

##### Participants:

H. WESTON CLARKE, JR. Evaluating the company's readiness.

RONALD E. CASEY. Relations between line and staff functions in manpower planning.

ANDREW H. SOUVERWINE. Effecting change in manpower planning practices.

#### Sociopsychological Aspects of the 1960 National Election

HERBERT E. KRUGMAN, *Chairman*

Participants: HERBERT I. ABELSON, J. E. BATCHELDER, LEO BOGART, IRVING CRESPI, JOHN F. KRAFT, and GERHART D. WIEBE.

**Current Developments in Hypnotherapy**

MELVIN A. GRAVITZ, Chairman

**Participants:**MILTON V. KLINE. New techniques in hypnotherapy.  
THEODORE X. BARBER. Current research in hypnotherapy.

HAROLD LINDNER. Dynamics of the patient-therapist relationship in hypnotherapy.

JOHN G. WATKINS. Existential hypnoanalysis.

Discussant: G. WILSON SHAFFER.

**Toward a Definition of Remission from Psychosis**

NORBERT FREEDMAN, Chairman

**Participants:**

GERALD KIEMAN. Psychopathological correlates of remission.

HERBERT SPOHN. The concept of remission and its correlates in the patient's perception.

DAVID MANN. An ecological approach to remission.

ROBERT L. KAHN. Physiological change and "improvement" in somatic therapies.

Discussant: JOSEPH ZUBIN.

**The Role of the Internship in Predoctoral Clinical Training**

HAROLD BASOWITZ, Chairman

Participants: JULES D. HOLZBERG, JULIUS WISNER,  
JUSTIN L. WEISS, AND GORDON DERNER.**The Role of the Clinical and Consulting Psychologist in Industry: Some Contrasting Views**

JOHN BENNETT, JR., Chairman

**Participants:**

BENJAMIN BALINSKY. An evaluation of the goals and objectives of the clinical psychologist in industry.

ALVIN O. BELLAK. The evolving accountability of the psychologist in corporate survival and growth.  
SAMUEL H. CLEFF. The clinical psychologist and the social organism.

JAMES F. LAWRENCE. Application of the team concept to the personnel assessment process.

HAROLD R. MUSIKER. Challenges and responsibilities for the clinician in the real world.

**S-R Models of Social Interaction: Problems and Possibilities**

EDITH D. NEIMARK, Chairman

**Participants:**

OGDEN R. LINDSLEY. Experimental analysis of cooperation and competition.

SEYMOUR ROSENBERG. A model for some behavioral processes in two-person interactions.

ROBERT GLASER AND DAVID KLAUS. Laboratory studies of team training.

V. B. CERVIN. Statistical theory of persuasion.

Discussant: IRWIN KATZ.

**SPECIAL MEETINGS**

Committee for Cooperation of Psychologists in Clinics for Mentally Retarded Children. ANNE M. RITTER AND RALPH W. CALVIN, Cochairmen.

Society for Client Centered Counseling. ALEXANDER BASSIN, Chairman.

**FILM**

Short term visual memory. EMANUEL AVERBACH.

**PRESIDENTIAL ADDRESS**

S. S. STEVENS. The Nomological Quest. JAMES J. GIBSON, Chairman.

# PROCEEDINGS OF THE THIRTY-FIRST ANNUAL MEETING OF THE ROCKY MOUNTAIN PSYCHOLOGICAL ASSOCIATION

WILBUR C. MILLER, Secretary  
*University of Denver*

THE thirty-first Annual Meeting of the Rocky Mountain Psychological Association was held at the Sundowner Motor Hotel in Albuquerque, New Mexico on May 11-13, 1961. Approximately 150 persons attended. Members from all six states of the association—Colorado, Idaho, Montana, New Mexico, Utah, and Wyoming—were in attendance.

Paul B. Porter served as President for 1960-61. Bert R. Sappenfield succeeded him as President for 1961-62.

Earl Swartzlander was elected as President-elect and will serve as President for 1962-63. Richard A. Lake was elected as Treasurer for a 3-year term.

The convention arrangements and facilities in Albuquerque were excellent, and many members took advantage of the opportunity to visit some of the scenic places of the historic Southwest.

The Annual Meeting for 1962 was set for Butte, Montana.

## PROGRAM

### PAPERS

Jewish orthodoxy and sex-role differentiation. WILLIAM A. SCOTT, *University of Colorado*.

Information and teacher effects on attitude change. NOLAN E. ASHMAN AND JAMES E. TEDESCHI, *Utah State University*.

Patterns of intellectual functioning in retarded readers with average mental ability. HELEN E. WILSON, *Mental Hygiene Clinic, Billings, Montana*.

Maternal permissiveness toward aggression and subsequent fantasy aggression in college students. DONALD A. WEATHERLY, *University of Colorado*.

Interpretation in group psychotherapy. RICHARD A. LAKE, *State Hospital South, Blackfoot, Idaho*.

Attitudes of mental patients wanting to stay in the hospital. HIRAM L. GORDON, *VA Hospital, Fort Lyon, Colorado*.

The performance of schizophrenic, brain damaged, and psychiatrically normal patients on tasks requiring integration of vision and touch. WESLEY D. DAVIS, *University of Colorado*.

The process of clinical inference. C. J. FINK, K. R. HAMMOND, AND F. J. TODD, *University of Colorado*.

Alternation as a function of reinforcement conditions and intertrial interval. MERRELL E. THOMPSON, *New Mexico State University*.

One-trial backward avoidance conditioning. JAY S. CALDWELL, *Utah State University*.

Stimulus alternation or response repetition. ANDREW E. LEE AND MERRELL E. THOMPSON, *New Mexico State University*.

The factor structure of human needs as measured by the Edwards PPS. G. ALEXANDER MILTON AND MILTON E. LIPETZ, *University of Colorado*.

A factor analytic study of human value. ROBERT L. BAKER AND RICHARD E. SCHUTZ, *Arizona State University*.

A criterion analysis of four interpersonal semantic differential clusters. RICHARD E. SCHUTZ, ARTHUR W. STAATS, AND CAROLYN K. STAATS, *Arizona State University*.

"Myco": A study of mushroom symbolism. STUART BOYD AND ALAN H. ROBERTS, *New Mexico Highlands University*.

Serial verbal learning as a function of length and statistical structure of materials. R. E. JONES, JR. AND LYLE E. BOURNE, JR., *University of Utah*.

The effect of type of reinforcement and relative prestige on verbal conditioning. ALBERT I. PRINCE, *University of Denver*.

A new technique for studying voluntary stimulus generalization. DONALD T. TOSTI, JUDITH RODE, WILLIAM D. DAWSON, AND HENRY C. ELLIS, *University of New Mexico*.

The effect of drive, response strength, and stress on spatial generalization. WILBUR C. MILLER AND ALBERT I. PRINCE, *University of Denver*.

A specification of Gibson's gradient theory of spatial vision. PAUL B. PORTER, *University of Utah*.

The influence of exposure to disproportionate frequencies of improved cube perspectives on the perception of a balanced Necker cube. BOBBY J. FARROW AND JOHN R. SANTOS, *Menninger Foundation, Topeka, Kansas*.

The associative scaling of random tactual stimuli. DAVID W. BESSEMER AND HENRY C. ELLIS, *University of New Mexico*.

Recognition of random tactual shapes following pre-differentiation training. CLINTON L. TRAFTON, JAMES DEVINE, AND HENRY C. ELLIS, *University of New Mexico*.

The effects of a top management faking set on the Gordon Personal Inventory. JOHN R. BRAUN, *Texas Christian University*.

Dimensions of descriptive adjectives used in reference letters: A factor analytic study. SHERWOOD H. PERES, *Sandia Corporation, Albuquerque, New Mexico*.

Correlational analysis of the SORT and MMPI. C. E. KELLEY, JR., *Texas Western College*.

Assessing the vocational potential of hemiplegias. JAMES A. HOWARD, *Long Beach, California*.

Differential EEG reaction times in the cat during several levels of electrocortical activity. R. B. PENDLETON, E. C. BECK, AND R. S. BOSWELL, *VA Hospital, Salt Lake City, Utah*.

The effect of infantile experience on the number of mast cells in the mouse. BEATA JENAS AND THOMAS F. DOUGHERTY, *University of Utah*.

Infantile stimulation in rats and the genesis of the disposition to emotionality. JAMES T. TEDESCHI, JR., *Utah State University*.

Effect of prior d-amphetamine administration on the later activity of rats. SAMUEL B. SCHNITZER AND SHERMAN ROSS, *University of Utah and APA Central Office*.

## SYMPOSIA

### Role of Drugs in Therapy

RALPH D. NORMAN, *University of New Mexico*, Chairman

Participants: RALPH D. NORMAN, *University of New Mexico*; ERWIN E. NELSON, *University of New Mexico*; AND FRED W. LANGNER, *Sandia Ranch Sanatorium*.

### The Research Program of HumRRO

LOREN WILLIAMS, *Fort Bliss Unit*, Chairman

### The Role of the Internship in Predoctoral Clinical Training

IRVING E. ALEXANDER, *National Institute of Mental Health*, Chairman

Participants: IRVING E. ALEXANDER, *University of Colorado Medical School*; MARVIN W. KAHN, *University of Colorado Medical School*; IJA N. KORNER, *University of Utah Medical College*; MILTON E. LIPETZ, *University of Colorado*; AND LESTER M. LIBO, *New Mexico Department of Public Health, Santa Fe, New Mexico*.

### Ethical Principles and Problems of the Psychological Consultant to Management

Participants: EARL E. SWARTZLANDER, *Swartzlander & Heyer, Denver, Colorado*; ALBERT W. HEYER, JR., *Swartzlander & Heyer, Denver, Colorado*; WILLIAM H. BROWN, *Utah Psychological Center, Salt Lake, Utah*; MAL LIEBRODER, *Utah Psychological Center, Salt Lake City, Utah*; NORMAN J. HARRIS, *Boulder, Colorado*; JOHN W. NEFF, *Pueblo, Colorado*; AND J. W. THOMAS, *Richardson, Texas*.

## INVITED ADDRESSES

RANDOLPH LOVELACE, *Lovelace Research Clinic*. Physiological Parameters of Space Flight.

TOM L. POPEJOY, *University of New Mexico*.

HADLEY CANTRIL, *Institute for International Social Research*. Competition of Political Systems.

## PRESIDENTIAL ADDRESS

PAUL PORTER, *University of Utah*. Mrs. Brigham Young.



PROCEEDINGS OF THE EIGHTH ANNUAL MEETING  
OF THE  
SOUTHWESTERN PSYCHOLOGICAL ASSOCIATION

GORDON V. ANDERSON, Secretary  
*University of Texas*

THE eighth Annual Meeting of the Southwestern Psychological Association was held at the Lafayette Hotel, Little Rock, Arkansas, April 6-8, 1961. More than 250 persons attended the program sessions, which included four workshops, two symposia, six research paper sessions including a special section for graduate student research papers; also an invited address and the Presidential Address.

Graduate students throughout the Southwest were invited to submit research papers for the section. Five of these were selected for presentation by the Program Committee on the basis of significance, originality, and clarity. A special panel of judges reviewed the papers to select the most outstanding for a special SWPA award of \$50.00 which went to Nancy Cohn, University of Houston, for her study, "Handling in Rats: Positive Reinforcer or Stressor?" Each participant was given a certificate of merit from SWPA. This program innovation was very successful and will be continued next year.

In his invited address, Horsley Gantt described his experiences with Pavlov, and showed a number of pictures of Pavlov taken in work, home, conference, and recreational settings. Fillmore Sanford delivered

the Presidential Address, "Behavioral Science and National Survival."

A recreational highlight of the convention was the *All Star Psycho Revue* following the banquet and invited address. Animal acts, sleight of hand tricks, and humorous monologs constituted the entertainment fare.

The new officers of the association for 1961-62 are: President, John Anderson, University of Arkansas; President-elect, Saul Sells, Texas Christian University; Secretary-Treasurer, Gordon Anderson, University of Texas.

At the Annual Meeting this year for the first time, a placement service was operated which was very successful. About 38 different openings were listed and 11 psychologists formally indicated their availability. Several confirmed placements were made through this service. It is likely to be continued by the association as a service to its members.

Committee chairmen for the association and for the convention were: Program, Irwin J. Knopf, Southwestern Medical School; Membership, David G. Ryans, University of Texas; Elections, William B. Lemmon, University of Oklahoma; Local Arrangements, Lewis Long, Little Rock, Arkansas; and Placement Desk, Gerard J. Bensberg, Arkansas State Board of Health.

## PROGRAM

### PAPER SESSIONS

#### Graduate Student Research Papers

IRWIN J. KNOPF, *University of Texas Southwestern Medical School*, Chairman

Handling in rats: Positive reinforcer : stressor?  
NANCY COHN, *University of Houston*.

Validation of two mazes in detection of sex differences and effects of X-irradiation in albino rats. VINCENT P. LUCHSINGER, JR., *Texas Technological College*.

Conditioning the working behavior of mentally retarded adolescents. ROBERT T. HARRIS, *University of Houston*.

Multivariate classification of individuals as normal or schizophrenic on the basis of the Holtzman Inkblot Technique. EDWARD C. MOSELEY, *Hogg Foundation for Mental Health*.

A study of the relationship between religious beliefs and practices and attitudes toward desegregation.  
MARCELA B. BARRON, *University of Arkansas*.

#### Child Psychology

MAURICE KORMAN, *University of Texas Southwestern Medical School*, Chairman

A validation study of the Draw-a-Person Test.  
FRANCES C. COLTHARP, *University of Texas Southwestern Medical School*.

Identification differences between accepted and rejected children at one critical stage of ego development.  
THEODORE S. BAUMBERGER, *University of Oklahoma*.  
Shifts in response reward and its effects upon response speed. MORTON RIEBER, *Baylor University College of Medicine*.

A developmental study of verbal conditioning in children. PAUL E. BAER, *Baylor University College of Medicine*.

### Learning

JAMES DYAL, *Southern Methodist University*, Chairman

The effect of position and exposure duration on irrelevant cue learning. DONALD H. KAUSLER AND E. PHILIP TRAPP, *St. Louis University and University of Arkansas*.

The effect of meaningfulness, mode of articulation, and locus of induced tension on paired-associate learning. NEIL D. KENT, *Oklahoma State University*.

Some factors bearing on size, shape, and placement of a vertical analog display presenting hovering information. L. E. WILKERSON AND W. G. MATHENY, *Bell Helicopter Company*.

The performance of "labile" and "stable" subjects on a simple vigilance task in quiet and in noise. REX LEBLANC, *Baylor University*.

### Clinical I

A. J. JERNIGAN, *VA Hospital, Dallas, Texas*, Chairman

Variables contributing to perceptual motor performance deficits in brain damage. OSCAR A. PARSONS, *University of Oklahoma Medical Center*.

Clinical prediction of stress behavior. CHARLES BRODIE, *University of Oklahoma Medical School*.

Changes in judgments of schizophrenic verbal responses as a function of practice and knowledge of results. STANLEY BLUMBERG, *University of Texas Southwestern Medical School*.

The influence of psychological-mindedness and information on accuracy of prediction. RICHARD C. JENTSCH, *Oklahoma City Mental Health Clinic*.

### Clinical II

WILLIAM SEEMAN, *University of Kansas Medical Center*, Chairman

Academic adjustment counseling through peer group interaction. WILLIAM F. BROWN, *Southwest Texas State College*.

A psychological contribution to the study of a hospital social structure. LAURENE APPLEBEE, NORMAN C. ELLIS, GEORGE W. ROGERS, AND WILLIAM A. ZIMMERMAN, *Osawatomie State Hospital, Kansas*.

Experimental studies of psychological effects of chlorpromazine in chronic schizophrenic women. THOMAS S. RAY, ROBERT E. RAGLAND, PATSY R. JOHNSON, J. PAUL COSTILOE, ALFONSO PAREDES, AND MERVIN L. CLARK, *Central State Griffin Memorial Hospital, Norman, Oklahoma*.

The relationship of psychophysiological conditioning to hypnosis. JOHN GLADFELTER AND JAMES HALL, *University of Texas Southwestern Medical School*.

### Experimental

JACK R. STRANGE, *Southern Methodist University*, Chairman

Sensory reinforcement and stimulus complexity. GERALD W. BARNES, *University of Arkansas*.

Relative effects of scopolamine and electroconvulsive shock upon habit reversal in white rats. LOH SENG TSAI, *Tulane University*.

Extinction of a partially reinforced response as a function of training. PENNY LEE AND NANCY POWELL, *Arlington State College*.

Paired-associate learning as a function of percentage of occurrence of response members, rate of presentation, and length of list. HARDY C. WILCOXON, *University of Arkansas*.

### SYMPOSIA

#### Role of the Internship in Predoctoral Clinical Training

KENNETH B. LITTLE, *National Institute of Mental Health*, Chairman

Participants: SANFORD GOLDSTONE, *Baylor University College of Medicine*; E. PHILIP TRAPP, *University of Arkansas*; PHILIP ROOS, *Board for Texas State Hospitals and Special Schools*; AND WAYNE H. HOLTZMAN, *Hogg Foundation for Mental Health*.

#### Psychophysiological Studies of Behavior

ROSCOE DYKMAN, *University of Arkansas Medical Center*, Chairman

#### A. Animal Research

Participants:

ROBERT MACK AND OTEL L. DAVENPORT, *University of Arkansas Medical Center*. Changes in urine as a component of the conditional pain reaction.

O. D. MURPHREE, *VA Hospital, North Little Rock, Arkansas*. Behavioral deficits subsequent to experimentally induced viral infection, X-irradiation, and anoxia.

#### B. Human Research

Participants:

PEGGY THOMASSON AKERMAN, *University of Arkansas Medical Center*. Effects of mild and moderate stress on autonomic and skeletomotor functioning.

CHARLES R. GALBRECHT, *University of Arkansas Medical Center*. Adaptation and extinction of autonomic components of the orienting responses.

SAMUEL W. BOELNER, *University of Arkansas Medical Center*. Background autonomic activity in normal pregnant women and in women suffering from toxemias of pregnancy.

## WORKSHOPS

### Problems Peculiar to Psychology Departments in Small Schools

R. B. CUTLIP, *William Woods College*, Chairman

#### I. Personnel Problems

Discussion Leader: JUDSON WHITE, *Stephen F. Austin State College*.

Discussants: L. L. AINSWORTH, JR., *Del Mar College*; W. L. BURGERON, *Louisiana Polytechnic Institute*; JACOB MANDEL, *East Central State College*; AND VERNON H. SCHEFER, *Kansas State College*.

#### II. Equipment Problems

Discussion Leader: EVA GOODENOUGH, *Southern State College*.

Discussants: EDWARD BAKIS, *Sterling College*; CORINNE BELL, *Oklahoma College for Women*; OSCAR A. ULLRICH, *Southwestern University*; AND WILLIAM G. DUVALL, *Hendrix College*.

#### III. Course Offerings and Theoretical Bias

Discussion Leader: MAXWELL LEACH, *Abilene Christian College*.

Discussants: OTTO R. FLOCKE, *Lamar State College of Technology*; KENNETH B. HAIT, *University of Southwest Louisiana*; ROBERT B. PRICE, *Southwestern College*; HARRIS H. WAY, *Central State College*; AND FORREST E. LADD, *Bethany Nazarene College*.

#### IV. Graduate Programs

Discussion Leader: ELIOT BOWER, *Sam Houston State College*.

Discussants: ARTHUR L. HENZE, *Arkansas State Teachers College*; STANLEY C. MAHONEY, *Fort Hays Kansas State College*; E. B. PIERSON, *Texas Education Agency*; DOROTHY RICE, *Henderson State Teachers College*; AND H. P. RUMFORD, *Kansas State College*.

## Group Psychotherapy

HAROLD R. WINER, *Dallas, Texas*, Chairman

#### Participants:

STEVE PRATT, *Larned State Hospital*. Group psychotherapy in a state hospital.

S. J. FIELDS, *University of Arkansas Medical Center*. A medical school use of group psychotherapy.

HAROLD GOOLISHIAN, *University of Texas Medical Branch*. The family in multiple impact therapy.

RAY McNAMARA, *Dallas Child Guidance Clinic*. A community clinical program for group psychotherapy.

HAROLD R. WINER, *Dallas, Texas*. Unwed mother's group.

## Conjoint Family Therapy

JOSEPH BECKER, *University of Illinois*, Chairman

#### Participants:

DONALD J. SCHUMAKER, *Southern Illinois University*. Family group interaction as a source of diagnostic information.

JOSEPH BECKER, *University of Illinois*. Interaction patterns in the conjoint family therapy of married female schizophrenics.

ROBERT H. DYSINGER, *National Institute of Mental Health*. A study of relationship changes at onset of schizophrenic psychosis.

HAROLD GOOLISHIAN, *University of Texas Medical Branch*. Family therapy.

NAKHLEH ZARZAR, *University of North Carolina*. Modes of family intervention.

## INVITED ADDRESS

HORSLEY GANTT, *Johns Hopkins University*. Recent Work on Higher Nervous Activity in Eastern Europe.

## SPECIAL MEETINGS

Business Meeting of the Southwestern Association of Independent Clinical Training Centers in Psychology. Workshop for Officers or Representatives of State Associations. Sponsored by the APA Board of Professional Affairs. STARKE HATHAWAY, Chairman.

## PRESIDENTIAL ADDRESS

FILLMORE SANFORD, *University of Texas*. Behavioral Science and National Survival.

# PROCEEDINGS OF THE SEVENTH ANNUAL MEETING OF THE SOUTHEASTERN PSYCHOLOGICAL ASSOCIATION

SUSAN W. GRAY, Secretary-Treasurer

*George Peabody College for Teachers*

THE seventh Annual Meeting of the Southeastern Psychological Association was held on April 13-15, 1961 in Gatlinburg, Tennessee. The Gatlinburg Inn and the Civic Auditorium were meeting headquarters. Approximately 450 people registered at the meetings. The program consisted of 10 symposia, 88 papers, and 1 invited address.

The Presidential Address, "The Animal's World of Space," was presented by John F. Dashiell of Wake Forest College. The address was followed by the Annual Business Meeting.

The Program Committee consisted of Irwin A. Berg, Chairman, Donald J. Lewis, and Ray S. Musgrave. Clifford H. Swenson, Jr. was Chairman of the Local Arrangements Committee. He was assisted by Ronald Brown, Louise Cureton, Ernest Furchtgott, Travis L. Hawk, Howard Hurt, Ohmer Milton, Kenneth Newton, Jerry Pascal, James Porter, Norman Rasch, Evelyn Rule, Raymond Shrader, Carl Sippelle, and Stanley Webster.

The Election Committee consisted of Stanford C. Ericksen, Chairman, Gilbert Meier, and Rue Cromwell.

Officers for 1961-62 are: Stanford C. Ericksen, President; Irwin A. Berg, President-elect; John F. Dashiell, Past President; Ralph M. Dreger, Secretary-Treasurer (1961-64). Members-at-large of the Executive Committee are: Paul Siegel (1960-62), Edward H. Loveland (1961-63), and Julius Seeman (1961-64).

Among the items transacted at the Annual Business Meeting and at the meeting of the Executive Committee were the following:

1. The report of the Secretary and the Treasurer's report were approved as presented.
2. Dues were again fixed at \$2.00 for full Members and \$1.00 for Student Affiliates.
3. The following actions of the Executive Committee were announced:
  - a. In the future no person should appear on the annual program more than one time in any one category of performance, that is, a person may read one paper, serve as participant in one symposium, as discussant in symposium, and as chairman of a symposium. Persons may co-author papers in addition to the one paper which the individual would read.
  - b. The board requested the Secretary-Treasurer to ballot the membership upon two matters concerning membership policies: (a) whether the geographical lo-

cation of members should be restricted to the states now listed in the Constitution of SEPA; (b) whether the membership wishes to set up a category of Life Member.

4. The 1962 meeting was set for March 29-31 at the Sheraton Hotel in Louisville, Kentucky.

5. It was announced that the current membership of SEPA stands at 683 full Members, 21 Affiliates, and 117 Student Affiliates—a total of 821 members. New members for 1960-61 were:

## FULL MEMBERS

George E. Ackley, Jr.	Jerry O. Haynes
Sidney Adams	H. Elston Hooper
Lewis R. Aiken, Jr.	Marion C. Hoppin
John C. Altrocchi	H. M. Houtchens
Albert D. Annis	Howard B. Hurt
Joseph M. Aposhyan	Walter Isaac
Jack Basham	T. H. Jerdee
Irving Bialer	J. Clyde Johnson
Richard Blanton	Ronald E. Johnson
Robert C. Bolles	A. Rayburn Jones
Mary W. Bowers	Lyle V. Jones
Norman Bowers	Thomas W. Jucik
Bradford N. Bunnell	Roger L. Kelley
Paul W. Caro, Jr.	Edwin L. Krauser
Bruce C. Carruth	Carl J. Lange
Carl M. Cochran	James E. Lindemann
Carroll M. Colgan	Erwin J. Lotsof
Joan H. Criswell	William McClelland
Anne Cunningham	Frederick L. McGuire
Hugh C. Davis, Jr.	Leslie F. Malpass
Jeanne DeMent	O. Edmund Martin, Jr.
J. Peter Denny	Richard L. Morrison
Francis H. Deter	Michael J. Pacella
Jean W. Dickinson	John D. Palacios
Ralph L. Dunlap	Carolyn Pinkard
Mary J. Eaton	J. M. Porter, Jr.
Jess H. Edds	M. H. Rabin
Samuel Thomas Elder	Norman L. Rasch
Nancy A. Fowler	Henry C. Rickard
William D. Glenn	Morris Lee Ridley
Aloysia M. Gorman	David Rothenberg
Joel Greenspoon	Stanley A. Rudin
Wilson H. Guertin	Julius Seeman
Samuel L. Guskin	Stanley A. Speal
Virginia S. Hardie	Robert F. Stepback, Jr.
Miles W. Hardy	E. Elizabeth Stewart
Bernice Harmon	Elizabeth H. Stokes
O. H. Harsch	Robert E. Taylor



Claude Thompson  
Robert Toal  
Martin Wallack  
Charles Walter  
Kenneth Warren  
John E. Westeen

Warren W. Willingham  
Paul J. Woods  
Howard E. Wright  
Cyrus M. York  
Donald M. Zimmerman

Judith Ann Burgin  
Joel R. Butler  
Lester Carr  
Maurice J. Donovan  
Robert B. Duke  
Riley F. Elder, Jr.  
John A. Farley  
Bettye J. Forrester  
Lowell A. Gough  
Laura Kay Gray  
Frances M. Greene  
John E. Hannon  
Curry B. Hearn, Jr.  
Wayne E. Henderson  
Mack R. Hicks

Robert F. Horner  
John W. Koehel  
Richard C. Labarba  
James R. Lundy  
William A. McLaurin  
Henry G. Masters  
Michael A. Morra  
Richard D. Petre  
Allen W. Ratcliffe  
Patricia H. Shockley  
Robert S. Tacker  
Catherine G. Terrell  
Ronald L. Webster  
Marlene Weinstein

## AFFILIATE MEMBERS

Michael H. P. Finn      Lawrence I. O'Kelly

## STUDENT AFFILIATES

Julian T. Allison      Wiley R. Boyles  
Maurine G. Behrens      Wolfgang Bringmann  
William E. Bingham      Charles E. Brown

## PROGRAM

## PAPER SESSIONS

## Animal Learning

DONALD J. LEWIS, *Louisiana State University*, Chairman

Strain differences in conditioned avoidance behavior in rats. DONALD P. FOSHEE AND GILBERT W. MEIER, *Vanderbilt University*.

The effect of partial reinforcement on generalization following successive acquisitions. CHARLES D. NOBLIN, EDWIN O. TIMMONS, AND HENRY C. RICKARD, *Louisiana State University, VA Hospital, Gulfport, Mississippi, and University of Alabama*.

Weight of food as a measure of magnitude of reward in maze learning. ERNEST FURCHTGOTT, *University of Tennessee*.

Performance on a black-white discrimination problem in a water maze as influenced by water temperature and swimming ability. PAUL J. WOODS AND CHARLES H. HOLLAND, *Hollins College*.

Classical conditioning in the planarian. R. BAXTER AND H. D. KIMMEL, *University of Florida*.

## Anxiety

FRED Y. BILLINGSLEA, *VA Hospital, Jackson, Mississippi*, Chairman

Anxiety and behavior. CHARLES C. MITCHELL AND ROBERT A. TOAL, *University of Tennessee*.

Response competition and the anxiety-as-drive concept: A direct study. MARTIN B. MILLER AND RUE L. CROMWELL, *George Peabody College for Teachers*.

Discrimination reaction time as a joint function of manifest anxiety and intelligence. JOHN R. STABLER AND JAMES A. DYAL, *Louisiana State University and Southern Methodist University*.

Manifest anxiety, social desirability, or response set: A reversal of the manifest anxiety and social desir-

ability scale. ALBERT C. KIRBY AND HENRY E. ADAMS, *Louisiana State University*.

A study of the differential effects of anxiety on auditory perceptual response to threat. JERRY N. BOONE, *Memphis Speech and Hearing Center, Tennessee*.

## Social Attitudes

JOHN THIBAUT, *University of North Carolina*, Chairman

A longitudinal study of religious attitudes among Berea College students. CLARA CHASSEL COOPER, *Berea College*.

Occupational prestige as expressed by Negro and white students. NICHOLAS M. VINCENT AND VIRGINIA DENTON, *Jacksonville University*.

Attitudes of the authoritarian personality in a quasi-therapeutic situation. WILLIAM S. JONES, *University of North Carolina*.

Attitude change in nursing aides. ROBERT V. HECKEL, *VA Hospital, Augusta, Georgia*.

## Human Learning I

FREDERICK H. KANFER, *Purdue University*, Chairman

Operant conditioning of the GSR. R. L. FOWLER AND H. D. KIMMEL, *University of Florida*.

How the "tutor" taught: Crowder's Mark I at Keesler. VIRGINIA ZACHERT, *Western Design and Electronics, Keesler Air Force Base*.

A proposed operant conditioning discrimination matrix for evaluating drug-behavior interaction. ARTHUR J. BACHRACH, *University of Virginia Medical School*.

Verbal conditioning and the effect of psychoanalytically derived interpretations upon verbal responses. HENRY E. ADAMS, JOEL R. BUTLER, AND CHARLES D. NOBLIN, *Louisiana State University*.

### School Adjustment

DOROTHY J. DAY, *Psychological Services Center, Jackson, Mississippi*, Chairman

- Personal adjustment following educational-vocational counseling: An extension and follow-up. JOHN E. WILLIAMS, *Wake Forest College*.
- Vocational interests as ranked by students and measured by Kuder Preference Record. JOHN DE LORGE AND NICHOLAS M. VINCENT, *Hollins College and Jacksonville University*.
- Application of the college characteristics index to problems of intergroup differences among students. FREDERICK B. ROWE AND MISKIT AIRTH, *Randolph-Macon Woman's College*.
- Personality and performance differences among college student scholars, leaders, and discipline problems. BEN BARGER, *University of Florida*.

### Motivation

GERALD R. PASCAL, *University of Tennessee*, Chairman

- Exploration in a Dashiell maze by hungry, thirsty, and satiated rats. JOHN DE LORGE AND ROBERT C. BOLLES, *Hollins College*.
- The relation of a classical drive mechanism to sensory stimulation as a function of age. W. RALEIGH THOMPSON, JR. AND WALTER ISAAC, *Emory University*.
- The relation between number of hours of food deprivation and suspended eating time following startle. PAUL S. SIEGEL AND MANNING J. CORREIA, *University of Alabama*.
- The rat's adaptation to a drinking schedule: Changing experience or changing need? ROBERT C. BECK, *Wake Forest College*.

### Educational Psychology

MARY MARGARET BURNS, *Palm Beach County Schools, Florida*, Chairman

- An exploratory study of nonpublic schools in Georgia. JAMES E. GREENE, SR., *University of Georgia*.
- Sociometric standings, vocational choices, and reactions to mathematical instruction of highly talented high school juniors. WILLARD H. NELSON AND MARION F. SMITH, *Florida State University*.
- The use of bipolar ratings in the study of the stereotype of the public school teacher. LAWRENCE S. WRIGHTSMAN, JR., *George Peabody College for Teachers*.
- Classroom adjustment of the underchosen child through changes in teacher attitudes and behavior. RALPH L. WITHERSPOON, R. P. KROPP, AND JERRY O. HAYNES, *Florida State University*.
- Effects of instruction and visual aids on automobile following distance. ROBERT B. SLEIGHT, *Applied Psychology Corporation, Arlington, Virginia*.

### Conflict

EARL C. BROWN, *Emory University*, Chairman

- Effects of three psychotropic drugs upon the acquisition of approach-avoidance conflict. RONALD L. WEBSTER, THOMAS ELDER, WAYNE T. ALCOCK, AND D. WINFRED TYLER, *Louisiana State University*.
- Latency of escape as a function of proximity to a conflict point. BRENDAN A. MAHER, *Harvard University*.
- Decision making and conflict theory: An analysis of Miller's postulates. JOHN M. ATTHOWE, JR. AND SIDNEY SIEGEL, *University of Alabama and Pennsylvania State University*.
- A test for the generalization of approach-avoidance conflict. THOMAS ELDER, WAYNE T. ALCOCK, RONALD L. WEBSTER, JUDITH ENTRIKIN, AND DREW HATFIELD, *Louisiana State University*.

### Sensation and Perception

RAY S. MUSGRAVE, *Mississippi Southern University*, Chairman

- Activation and visual perceptual threshold. ROBERT W. BUCHANAN, *Arlington, Virginia*.
- An investigation of interaction between vision and audition modalities in monkeys. HENRY G. MASTERS AND WALTER ISAAC, *Emory University*.
- Stimulus spacing, judgment, and shift in judgment. SAMUEL FILLENBAUM, *University of North Carolina*.
- Effects of context on the subjective equation of auditory and visual intensities. KENDON SMITH AND ANN HOWELL HARDY, *University of North Carolina Woman's College*.
- Behavioral efficiency in a visual monitoring task as a function of signal rate and observer age. C. MICHAEL YORK, *American Institute for Research*.

### Verbal Behavior

LOUIS D. COHEN, *Duke University*, Chairman

- Manipulations of verbal behavior in a group psychotherapy setting. HERMAN CARL SALZBURG, *VA Hospital, Augusta, Georgia*.
- Manipulating verbal behavior in groups: A comparison of three intervention techniques. HENRY C. RICKARD AND EDWIN O. TIMMONS, *University of Alabama and VA Hospital, Gulfport, Mississippi*.
- A code for recording verbalizations in a group situation. EDWIN O. TIMMONS AND HENRY C. RICKARD, *VA Hospital, Gulfport, Mississippi, and University of Alabama*.
- The effect of timed versus nontimed discussion upon measures of influence and change in small groups. ROLAND L. FRYE AND THOMAS M. STRITCH, *Mississippi Southern College*.

Experimental manipulation of direction of speech in a neuropsychiatric group. JOHN E. HANNON, CAROLYN CALHOUN, AND JOE ADAMS, *University of Alabama*.

### Response Bias

FRANK W. FINGER, *University of Virginia*, Chairman

The credibility of pure response set. C. W. GRAY AND HELEN E. CRISP, *North Carolina State College*.

Identification of ambiguity as a dispositional property of ratees. HOWARD G. MILLER AND DONALD W. DREWS, *North Carolina State College*.

The generality of deviant responses in critical and noncritical areas of behavior. JOEL R. BUTLER, THOMAS ELDER, AND HENRY E. ADAMS, *Louisiana State University*.

The effect of type of scale and general response sets upon personality judgments. THOMAS M. STRITCH, ROLAND L. FRYE, AND OSCAR N. WALLEY, *Mississippi Southern College*.

### Anxiety in College

CLIFFORD H. SWENSEN, *University of Tennessee*, Chairman

Anxiety, college grades, and college graduation. CHARLES D. SPIELBERGER, *Duke University*.

The effects of anxiety on grades and dropouts for college freshmen. J. BROWN GRIER, *Duke University*.

The effects of counseling on the academic performance of anxious college freshmen. EDWARD S. KATKIN, *Duke University*.

Personality characteristics of anxious college students who voluntarily participated in an academic orientation counseling program. J. PETER DENNY, *Duke University*.

### Animal Behavior

JOHN B. WOLFE, *University of Mississippi*, Chairman

Irradiation and aging: Behavioral implications. ADAM P. MATHENY, JR. AND GILBERT W. MEIER, *Vanderbilt University*.

Competing responses and electroconvulsive shock. HENRY E. ADAMS AND DONALD J. LEWIS, *Louisiana State University*.

Electroconvulsive shock as an unconditioned stimulus in the classical conditioning of an emotional response (defecation). WILLIAM SHARP AND HENRY E. ADAMS, *Louisiana State University*.

### Clinical

ERWIN J. LOTSOFF, *Louisiana State University*, Chairman

An ataractic drug as an adjunct to psychotherapy with alcoholics. HUGH H. HADEN, JR. AND RAYMOND D.

FOWLER, *Alabama Commission on Alcoholism and University of Alabama*.

The prediction of outcome in the treatment of outpatient alcoholics. RAYMOND D. FOWLER, JR. AND JAMES L. PATE, *University of Alabama*.

The phenomenon of resistance in the psychotherapist. SIDNEY M. JOURARD, *University of Florida*.

A search for important stimulus variables in the early family relationships of schizophrenic patients. ROBERT F. HORNER, *University of Tennessee*.

Are differences in schizophrenic symptoms related to the mother's avowed attitudes toward child rearing? WILSON H. GUERTIN, *University of Florida*.

Dimensions of delinquent behavior. HERBERT C. QUAY AND LAWRENCE BLUMEN, *Vanderbilt University*.

### Human Learning II

PAUL S. SIEGEL, *University of Alabama*, Chairman

Serial position as a cue in paired-associate learning. SLATER E. NEWMAN AND ELI SALTZ, *North Carolina State College and Wayne State University*.

Nonassociate learning as a function of a learning method. F. T. CRAWFORD, *Florida State University*.

A comparison of slow learners and fast learners in a study of the effects of prolonged learning on learning. J. L. WIPF AND W. B. WEBB, *University of Florida*.

Response acquisition and extinction as a function of KR-delay, KR-duration, post KR-delay, and inter-response interval. J. CLYDE JOHNSON AND SLATER E. NEWMAN, *North Carolina State College*.

Response strength of stimulus compounds containing elements trained in different orders. H. D. KIMMEL, FRANCES A. HILL, AND R. L. FOWLER, *University of Florida*.

Learning in a two-person zero-sum game. JAMES L. PATE, *University of Alabama*.

### Group Behavior

JACK BASHAM, *VA Hospital, Gulfport, Mississippi*, Chairman

Test score prediction and risk: A dissonance theory approach. DONALD E. JACKSON, *University of Alabama*.

Some influences of types of reinforcement on the efficiency and coalescence of problem solving groups. FRANK MULLINS, ROLAND L. FRYE, AND THOMAS M. STRITCH, *Mississippi Southern College*.

Personality similarity as a function of group membership. CARROLL E. IZARD, *Vanderbilt University*.

Formal aspects of group interaction among aged and among middle aged individuals. MARTIN LAKIN AND STUART WILSON, *Duke University*.

The distinction between dogmatic and rigid thinking: A critical replication. ROBERT N. VIDULICH, *Louisiana State University*.

The effects of information source status and dogmatism upon conformity behavior. ROBERT N. VIDULICH AND IVAN P. KAIMAN, *Louisiana State University*.

### Psychodiagnostics

MARTIN J. BRENNAN, *VA Hospital, Augusta, Georgia*, Chairman

A comparison of the factor structure of normals and retardates on the WISC. ALFRED A. BAUMEISTER AND CLAUDE J. BARTLETT, *George Peabody College for Teachers*.

Stability of Rorschach body image scores over a two-month interval. OWEN L. MCCONNELL AND PAUL G. DASTON, *Duke University and VA Hospital, Durham, North Carolina*.

The relationship of Rorschach productivity to overt psychiatric symptomatology: A test of Phillips' and Smith's hypothesis. HENRY B. ADAMS AND G. DAVID COOPER, *VA Hospital, Richmond, Virginia*.

An analysis of the WISC with institutionalized mental defectives. ARTHUR E. ALPER, *Medical College of Georgia*.

Drawing ability and Bender-Gestalt performance. L. CROCKER PEOPLES AND RICHARD P. MOLL, *VA Hospital, Atlanta, Georgia, and Georgia Institute of Technology*.

### Brain Function

THOMAS M. STRITCH, *Mississippi Southern University*, Chairman

The effects of sensory stimulation on the activity level of normal and prefrontal lobectomized rats. M. A. ALEXANDER AND WALTER ISAAC, *Emory University*.

An investigation of changes in cortical activity during serial learning. LARRY W. THOMPSON AND WALTER D. OBRIST, *Duke University Medical Center*.

Postoperative conditioning of an operant response in rats with bilateral prefrontal lesions. THOMAS E. BREEN, WAYNE T. ALCOCK, AND THOMAS ELDER, *Louisiana State University*.

Sensory stimulation and spontaneous reorganization of a visual habit. WALTER ISAAC, *Emory University*.

An apparent shift in locus of nervous function as a function of age. WALTER ISAAC AND E. JO BAKER, *Emory University*.

Acquisition of a serial discrimination habit following frontal ablation. BRENDAN A. MAHER, *Harvard University*.

### Personality

W. GRANT DAHLSTROM, *University of North Carolina*, Chairman

Personality correlates determined by tachistoscopic object recognition. HANS HAHN, *Transylvania College*. Task approach versus task performance in personality assessment. WILLIAM H. FITTS, *Nashville Mental Health Center, Tennessee*.

A psychological interpretation of a case of multiple personality. JACK D. HAIN AND MARK M. CONGDON, *University of Virginia School of Medicine*.

The relationships of dress to selected measures of personality in undergraduate women. LEWIS R. AIKEN, JR., *University of North Carolina Woman's College*.

### SYMPOSIA

#### Psychology and the Educative Process

SUSAN W. GRAY, *George Peabody College for Teachers*, Chairman

#### Participants:

ALLEN CALVIN, *Hollins College*. Implications for education of current research on automated instruction.

LOUISE CURETON, *Knoxville, Tennessee*. Project TALENT: A look at today's schools.

JOEL GREENSPOON, *Florida State University*. Educational implications of research upon verbal conditioning.

WILLIAM D. SPEARS, *University of Florida*. Experimental psychology and educational practice.

#### The Psychologist in Community Mental Health Programs

J. WILBERT, *United States Public Health Service*, Chairman

#### Participants:

WILLIAM C. RHODES, *George Peabody College for Teachers*. Community mobilization for child behavioral problems.

CARL EISDORFER, *Duke University*. The psychologist as a community consultant.

JOHN MCKEE, *Alabama State Mental Health Division*. Mental health and the school age child.

LLOYD BORSTELMAN, *Durham Child Guidance Clinic, North Carolina*. Parent education for child mental health.

Discussant: PAUL PENNINGROTH, *Southern Regional Education Board*.



### **The Role of Internship in Predoctoral Clinical Training**

IRVING E. ALEXANDER, *National Institute of Mental Health*, Chairman

Participants: FRANKLIN SHAW, *University of Alabama*; HALBERT B. ROBINSON, *University of North Carolina*; RICHARD BLANTON, *University of Kentucky*; and LOUIS D. COHEN, *Duke University*.

### **Perspectives in Behavioral Pharmacology**

ARTHUR J. BACHRACH, *University of Virginia Medical School*, Chairman

Participants:

SHERMAN ROSS, *APA Central Office*. The experimental challenge of behavioral pharmacology.  
JOEL GREENSPOON, *Florida State University*. Psychopharmacological research in normal behavior.  
W. GRANT DAHLSTROM, *University of North Carolina*. Human factors in drug research on human subjects.  
SANFORD COHEN, *Duke University School of Medicine*. Research problems in behavioral pharmacology related to studies of neuroendocrine activity.

### **Some Federal Sources of Support for Psychological Research: Their Programs and Requirements**

HENRY S. ODBERT, *National Science Foundation*, Chairman

Participants: DENZEL D. SMITH, *Office of Naval Research*; JULIUS SEGAL, *National Institutes of Health*; HOWARD F. HJELM, *Office of Education*; and HENRY S. ODBERT, *National Science Foundation*.

### **Reaction of 1958-59 Psychology Graduates to Their Training**

PAUL W. PENNINGROTH, *Southern Regional Education Board*, Chairman

Participants: PAUL W. PENNINGROTH, *Southern Regional Education Board*; STANFORD C. ERICKSEN, *Vanderbilt University*; and MELVIN P. REID, *Florida State Board of Health*.

### **The Seriously Disturbed Child**

NICHOLAS HOBBS, *George Peabody College for Teachers*, Chairman

Participants:

WILLIAM J. VON LACKUM, *Gailor Psychiatric Hospital*. The disturbed and the mental health clinic.

RALPH L. DUNLAP, *North Carolina Memorial Hospital*. Long-term inpatient treatment of severely disturbed children.

NICHOLAS HOBBS, *George Peabody College for Teachers*. Residential schools for disturbed children.

MELVIN P. REID, *Florida State Board of Health*. The emotionally disturbed child from a public health viewpoint.

### **Projective Techniques: Whither and Yon**

JOSEPH G. DAWSON, *University of Florida*, Chairman

Participants:

THOMAS W. RICHARDS, *Louisiana State University School of Medicine*. Projective techniques and personality research.  
LOUIS D. COHEN, *Duke University*. Use of projective techniques in cultural studies.  
JOSEPH G. DAWSON, *University of Florida*. Projective techniques and psychopathology.  
HUGH C. DAVIS, JR., *University of Florida*. Recent concepts of projective techniques in psychotherapy.

### **Methods and Techniques for Developing an Effective Psychology Program in VA Hospitals**

CARL L. ALTMAIER, *VA Area Office, Atlanta, Georgia*, Chairman

Participants: JACK BASHAM, *VA Hospital, Gulfport, Mississippi*; PAUL G. DASTON, *VA Hospital, Durham, North Carolina*; CORNELIUS A. SCHOPER, *VA Hospital, Columbia, South Carolina*; PHILIP A. CARMAN, *VA Hospital, Mountain Home, Tennessee*; CHARLES A. STENGER, *VA Hospital, Coral Gables, Florida*; and JAMES E. LINDERMAN, *VA Hospital, Salisbury, North Carolina*.

### **The Prepsychology Curriculum: The Next Step in Psychological Training**

RALPH MASON DREGER, *Jacksonville University*, Chairman

Participants: BRUCE V. MOORE, *University of Miami*; THOMAS W. RICHARDS, *Louisiana State University School of Medicine*; CLAUDE R. THOMPSON, *Jacksonville University*; and WILSE B. WEBB, *University of Florida*.

### **INVITED ADDRESS**

JAMES OLDS, *University of Michigan*. Brain Mechanisms of Positive Reinforcement.

PROCEEDINGS OF THE FIFTY-THIRD ANNUAL MEETING  
OF THE  
SOUTHERN SOCIETY FOR PHILOSOPHY AND PSYCHOLOGY

DAN R. KENSHALO, Secretary

*Florida State University*

**A**PPROXIMATELY 205 members, friends, and guests of the Southern Society for Philosophy and Psychology met at the Atlanta-Biltmore Hotel in Atlanta, Georgia, for its fifty-third meeting on March 30-April 1, 1961. The hosts for the meeting were the Departments of Psychology and Philosophy of Emory University, Atlanta, Georgia. Local Arrangements were made under the direction of Leroy E. Loemker, Emory University, with Earl A. Alluisi, of Emory University, and George Seward, of Oglethorpe University, serving as cochairmen. The program was under the cochairmanship of Stanford C. Ericksen and John J. Compton, both of Vanderbilt University.

At the Annual Business Meeting, in addition to the receipt of committee reports and conduct of SSPP business, the following psychologists and philosophers were elected to membership in the society:

MEMBERSHIP

Irwin Samuel Bernstein	Bernard D. Kaiman
James Herbert Blackhurst	William A. Mason
Guido Borasio	Emil W. Menzel, Jr.
John R. Braun	Richard Mills Owsley
Erwin M. Breithaupt, Jr.	Harry Burnell Pannill
Hugh H. Caldwell	Charles C. Perkins, Jr.
Haughton Baker Dalrymple	Percy Carwell Reed
James W. Dye	Charles L. Reid
Joseph Elkins	George Seward
Raymond Dalton Fowler	Franklin Julius Shaw
Paul C. Hayner	Donald W. Sherburne
Max Oliver Hocutt	Samuel Enoch Stumpf
Roy Howard	Stan J. Velinsky
Raymond George Hunt	Irvin W. Weaver
James A. Jordan, Jr.	Warren W. Willingham

ASSOCIATE MEMBERSHIP

Clement J. Dore	Richard P. Smith
Donald James Levis	Donald H. Thor
Henry M. Moore, Jr.	John Bradford Thurmond
Ross E. Shawaker	

The following officers of the society were elected: William M. Hinton, President; Leroy E. Loemker, President-elect; Leland E. Thune, Treasurer; Charles Hartshorne, Member of Council for Philosophy; and Paul S. Siegel, Member of Council for Psychology. Dan R. Kenshalo will continue to serve as Secretary; and Stanford C. Ericksen, Harold N. Lee, and James M. Vanderplas will continue to serve as Council Members.

The members accepted an invitation from the Naval Air Station, and Southwestern at Memphis, to hold the next meeting in Memphis, Tennessee.

At the first joint session the "History of the Southern Society for Philosophy and Psychology" was presented by Marjorie S. Harris, of Randolph-Macon Woman's College. Rolland H. Waters, of the University of Florida, served as Chairman of the second joint session at which a paper was presented by Charles S. Morris, of the University of Florida, entitled "Some Current Problems in the Study of Language." Charles N. Cofer, of New York University, and James K. Feibleman, of Tulane University, commented on Morris' paper.

The second joint session was chaired by Wilse B. Webb, of the University of Florida, at which a message of welcome was extended from Mayor William B. Hartsfield of Atlanta, Georgia, to the society, and the Presidential Address, entitled "Science as the Scientific Institution: A New Approach," was presented by Rubin Gotesky, of Northern Illinois University.

The special award papers were presented by William T. Blackstone, of the University of Florida, on "Are Metaethical Theories Normative?" and by Dempsey F. Pennington, of the University of Alabama, on "Parameters of Interference Times in Rats as a Function of Degree of Brain Damage." These are selected annually from among those papers presented by members who have not yet received their PhD degree, or who have received them within the past 5 years.

## PROGRAM

PSYCHOLOGY PAPER SESSION<sup>1</sup>

## Psychophysiology

PAUL S. SIEGEL, *University of Alabama*, Chairman

Effects of desoxycorticosterone acetate on the startle response of the rat. K. E. MOYER, *Carnegie Institute of Technology*.

The duplication of early experience effects through chronic drug administration. FREDERICK W. HUFF AND GILBERT W. MEIER, *Vanderbilt University*.

The effect of septal hyperemotionality upon submissive behavior. BRADFORD N. BUNNELL, J. BEMPORAD, AND C. K. FLESHER, *University of Florida*.

Parameters of interference times in rats as a function of degree of brain damage. DEMPSEY F. PENNINGTON, *University of Alabama*.

Effects of serotonin and physostigmine upon one-trial reversal learning in rats. LOH SENG TSAI, *Tulane University*.

Motivation in so-called random activities in rats, chicks, and fish. J. HITT, W. F. ANGERMEIER, AND J. WILBOURN, *Austin College*.

## Motivation

RAYMOND G. HUNT, *Washington University*, Chairman

Motivation: An attempt to synthesize. W. F. ANGERMEIER, *Austin College*.

The origin of the paraphysiological drives. JAMES C. CRUMBAUGH, *Bradley Center*.

Personal characteristics associated with certain motives for choosing teaching as a vocation. JAMES E. GREENE AND MARY H. SCOTT, *University of Georgia*.

## Social Psychology

JOHN M. ATTHOWE, JR., *University of Alabama*, Chairman

Effect of group size upon public and private efficiency. ROLAND L. FRYE AND THOMAS M. STRITCH, *Mississippi Southern College*.

Effect of number of scale items upon coalescence and stability measures. THOMAS M. STRITCH, ROLAND L. FRYE, AND OSCAR N. WALLEY, JR., *Mississippi Southern College*.

Attitudes of white students toward the Negro as related to sit-in demonstration against lunch counters. KEY L. BARKLEY, *North Carolina State College*.

<sup>1</sup> Copies of most of these papers may be obtained from: Convention Reports Duplication Service; 1201 Worton Boulevard; Cleveland 24, Ohio.

Stereotyping of negroes and whites: A second analysis of magazine pictures. AUDREY SHUEY, *Randolph-Macon Women's College*.

Authoritarianism and leadership. GEORGE D. MAYO, *Naval Air Station, Memphis, Tennessee*.

## Yerkes Laboratories of Primate Biology

EMIL W. MENZEL, JR., *Yerkes Laboratories of Primate Biology*, Chairman

Problem seeking in the chimpanzee. R. K. DAVENPORT, JR. AND E. W. MENZEL, JR., *Yerkes Laboratories of Primate Biology*.

The reinforcing effects of various social activities for chimpanzees. W. A. MASON, *Yerkes Laboratories of Primate Biology*.

The effects of early experience upon visual exploratory behavior in chimpanzees. C. M. ROGERS, R. K. DAVENPORT, JR., AND E. W. MENZEL, JR., *Yerkes Laboratories of Primate Biology*.

The effects of cumulative experience upon behavior toward novelty in young chimpanzees. E. W. MENZEL, JR., R. K. DAVENPORT, JR., AND C. M. ROGERS, *Yerkes Laboratories of Primate Biology*.

## Perception

GILBERT W. MEIER, *Vanderbilt University*, Chairman

Some determinants of auditory pattern perception. MALCOLM D. ARNOULT AND WINTON H. MANNING, *Texas Christian University*.

Visual area and the constant-ratio rule. MILTON H. HODGE, *University of Georgia*.

A study of effects resulting from double simultaneous stimulation of the skin. CARL E. SHERRICK, JR., *Central Institute for the Deaf, St. Louis, Missouri*.

Analysis of object-alternation learning by rhesus monkeys. ISAAC BEHAR, *United States Army Medical Research Laboratory, Fort Knox, Kentucky*.

Comparative studies in the quantitative analysis of form discrimination: II. The contribution of areal symmetry, rotation, and sidedness. K. M. MICHELS AND LLOYD HITCHCOCK, JR., *Purdue University*.

## Human Performance

M. CARR PAYNE, JR., *Georgia Institute of Technology*, Chairman

The application of the psychophysical law to performance evaluation. G. H. WHITLOCK, *University of Tennessee*.

Effects of prolonged learning on learning. WILSE B. WEBB AND JOHN L. WIFF, *University of Florida*.

Utilizing closed circuit television. RAYMOND C. BICE, *University of Virginia*.

Controlling past experience in human research. JOHN A. ATTHOWE, JR., *University of Alabama*.

### PSYCHOLOGY SYMPOSIA

#### Teaching Machines in Perspective

LELAND E. THUNE, *Vanderbilt University*, Chairman

Participants: VIRGINIA ZACHERT, *Western Design & Electronics, Keesler Air Force Base*; THOMAS F. GILBERT, *University of Alabama*; AND STANFORD C. ERICKSEN, *Vanderbilt University*.

#### Human Performance and Work-Rest Cycling

EARL A. ALLUISE, *Emory University*, Chairman

Participants: JAMES T. RAY, *Lockheed Aircraft Corporation, Georgia*; O. S. ADAMS, *Lockheed Aircraft Corporation, Georgia*; AND EDWARD A. BILODEAU, *Tulane University*.

### SPECIAL MEETING

Workshop for Officers of State Psychological Associations. Sponsored by the APA Board of Professional Affairs. IVAN N. MENSCH, *University of California School of Medicine, Los Angeles*, Chairman.



## Comment

### Illness, Responsibility, and Intervention

In a recent article (*Amer. Psychologist*, 1961, 16, 69-74), Ausubel has questioned Szasz' position that mental illness is a disease process only by virtue of its having been so labeled. While Szasz' position seems to imply that the mentally ill patient is responsible for his behavior rather than being a passive participant in an ego-alien disease process, Ausubel contends that most mentally ill patients should be considered to be victims of a disease process and accorded the same exemption from ethical considerations as is enjoyed by people with any illness. While both positions seem to be well argued, it appears that the authors have neglected a possible alternative to the two extremes of responsibility versus no responsibility in the so-called mental illness (or any other illness, for that matter).

I should like to suggest that at different points in the longitudinal process we call mental illness, patients' responsibility for their behavior will vary. For example, during the acute phase of the illness when the patient manifests symptoms suggestive of a disordered physiology, e.g., hallucinations, confusion, disorientation, he may be considered to be engaging in behavior which follows physiological rather than psychosocial laws and at these times, he may well not be responsible for his behavior (as we usually conceptualize responsibility). However, during the preacute phase of his illness, he may be considered to be responsible for the fact that his character structure is inadequate to handle the stresses of life, an inadequacy which predisposes him to sustained anxiety with the attendant possibility of disordered physiology. Similarly, we can hold the postacute individual responsible for not extracting secondary gains from his psychotic episode.

What I am suggesting is that mental illness can be viewed much as we view a psychosomatic process: with the psychosocial inadequacies which predispose the individual to anxiety, and the secondary gain of the illness, being the problems of social science; while the somatic manifestations of the process, which seem to follow physiological rather than psychosocial laws, the province of medicine. An analogy we might use in discussing responsibility in mental illness is peptic ulcer. During the preulcer phase when anxiety is the dominant symptom, we can and should hold the individual responsible for learning more effective methods for meeting the stresses of life than he now employs. Similarly, during the postulcer phase, we can and should hold the individual responsible for not utilizing his ulcer for secondary gain. However, during the ulcer phase when the gastric hyperacidity actually erodes the

gastric mucosa, the ulcer per se follows physiological laws more closely than it does psychosocial laws, analytic interpretations of the symbolic aspect of ulcer lesions notwithstanding. No one would argue against teaching the child who touches hot stoves how to become responsible for recognizing and dealing with heated objects even while treating the burns which result from heat. Perhaps this alternate view of patient responsibility during any pathological process will also help the helping professions to clarify their responsibilities in the treatment of the "sick" individual.

CHARLES ROTHSTEIN  
Veterans Administration Center  
Togus, Maine

A rather curious and probably untenable argument is advanced by Ausubel . . . in support of the contention that the use of physical measures in the treatment of psychological symptoms is warranted, irrespective of whether the underlying cause of the mental symptoms is physical or psychological. He observes:

Furthermore, the use of medical measures in treating behavior disorders—irrespective of whether the underlying causes are neurol or psychological—is defensible on the grounds that if inadvertent impairment of the neural substrate of personality can have distortive effects on behavior, directed manipulation of the same substrate may have therapeutic effects (p. 73-74).

Thus, the implication is that since medical intervention may affect the psychological behavior, the latter falls within the realm of a disease process.

By way of analogy, let us consider the case of a child with an arithmetical learning disability. It is unlikely that any reasonable individual would regard this sample of psychologically deviant behavior as an indication of disease nor would very many recommend medical intervention. Yet it is obvious that "inadvertent impairment of the neural substrate" could contribute to some cases of arithmetical learning disability, and it is always conceivable, of course, that direct manipulation of the substrate in some cases may have some ameliorative effect. Using Ausubel's argument, however, *all* arithmetical learning disabilities could be construed as disease processes for which physical treatment methods are justified.

The obvious point to be made is that the facts that all behavior is mediated through neurol structures and physiological processes and that impairment in these may result in disturbed behavior in no way support the proposition that the use of medical measures in treating

behavior disorders is justified. Medical interventions for psychological disturbances seem to be warranted only when it can be demonstrated that, first, such procedures are directed toward the alleviation of certain underlying physical anomalies, and second, that the disturbances can be best treated by means of such interventions. Moreover, the fact that physical or psychological interventions can affect behavior in no way bears on the question of whether the condition represents a disease process or not.

ALEXANDER TOLOR  
Fairfield State Hospital  
Newtown, Connecticut

### Comment on "Anxiety and Behavior Scientists' Behavior"

Levy's amusing and satirical article "Anxiety and Behavior Scientists' Behavior" (*Amer. Psychologist*, 1961, 16, 66-68) deserves comment. Levy attempts to demonstrate a relationship between the publication of two instruments for the measurement of anxiety (Taylor's Manifest Anxiety scale, *MA*, and the Children's Form of the Manifest Anxiety scale, *CMA*) and a subsequent rise in published research dealing with anxiety. However, a casual glance at Levy's graph showing year-by-year changes in the percentage of papers listed under "anxiety" in *Psychological Abstracts* reveals that the trend toward greater interest in anxiety precedes the publication of Taylor's original paper in 1951. In addition a perusal of the biochemical or pharmacological literature shows this same increasing trend toward anxiety as a focus of interest anteceding the *MA*.

Levy's second graph, showing the percentage of papers listed under "anxiety" and "fears" in *Child Development Abstracts*, is even more misleading. This graph shows a large increment in the percentage of papers relating to anxiety from 1956 (the year the *CMA* was published by Castaneda et al.) to 1957. However, more careful study of *Child Development Abstracts* reveals that 1 of the 13 papers listed under "anxiety" in 1957 is the original paper of Castaneda et al. describing the *CMA* and that 5 more of the 13 were written by the same group of authors exploring various facets of their instrument. These can hardly be considered in the count since no new authors are involved. In addition, of the remaining 7 papers (written by other authors) listed in the 1957 *Child Development Abstracts*, 5 were actually published in 1956, the same year the *CMA* appeared. Considering that the authors of these papers would have had to read the Castaneda's paper, design and execute their own research, analyze the data collected and publish their report all within 12 months, it is unlikely that the Castaneda study is responsible for these other reports.

A more reasonable procedure for determining the possible influence of the *CMA* on the publication of anxiety studies in children would be to consider the number of papers by the year actually published. An analysis of *Child Development Abstracts* in this way reveals that 13 papers listed in the abstracts under "anxiety" and "fears" were written in 1956 (the year the *CMA* was published) and only 6 in 1957. In other words, the publication of the *CMA* was followed by a decrease rather than an increase in papers relating to anxiety and fears in children.

Of course it is common for the development of a new instrument or technique to stimulate research along a particular line. Around 1680 Leeuwenhoek developed a microscope which made microorganisms and red blood cells visible. It did occur to others to look through it and report what they saw and, in time, important discoveries relating to the nature of life, the causes of disease, etc. resulted. This is, in fact, the usual order of events in physics, chemistry, and other sciences. We should not be alarmed if the development of these two anxiety measures has indeed stimulated interest in the problem of anxiety and it would seem reasonable to hypothesize that they have to some extent. What is objected to is not Levy's hypothesis but the feast of *non sequiturs* he cites in support of it.

JOHN PAUL BRADY  
Institute of Psychiatric Research  
Indiana University Medical Center

### The Social Architect

Every once in a while, these days, references appear in official psychological literature to a kind of professional activity to which psychologists may be particularly well suited, but to which, seemingly, they have been indifferent.

A recent report of the APA Ad Hoc Committee on the role of the APA in Mental Health Programs and Research (*Amer. Psychologist*, 1959, 14, 820-825) carries the assertion that "The most recently recognized task of mental health is to bring about individual well being by modifying communities and larger units of society" (p. 821). One might infer that applied psychologists can make a significant professional-scientific contribution by interesting themselves not only in psychotherapeutic efforts in relation to "disturbed" persons, either individually or in assembled groups, but also in the larger—and possibly even more fundamental—area of extending helping services to established community groups.

Still more recently, E. Lowell Kelly (Division 12 Newsletter, 1961, 14) has discussed most provocatively the "image" (and, to me at least, sad future) of clinical psychology. In the course of his presentation he has advanced his personal view that clinical psy-

chology, in order to realize its unique professional potential, might well adopt the Architect rather than the Physician as its model. Psychological "Consultants on Living," in addition to their efforts in relation to psychopathology, would make themselves available "to assist normal people to lead more fulsome lives" (p. 10).

While Kelly's general remarks suggest that his Consultants on Living would find their prospective clients among individuals and possible family groups, I see his position as quite compatible with the position taken by the ad hoc committee if we conceive of the "Social Architect" role as including the possibility of assisting people to lead more satisfying lives *through their spontaneous association with other people*, that is, in the context of their natural groupings in ordinary community life.

While I personally believe that the Consultant on Living role calls for broader perspectives than are usually encompassed by the single discipline of psychology—and certainly broader perspectives than are emphasized in the present training of clinical psychologists—I am unreservedly with Kelly in his ideal. I take this position not only out of theoretical interest but also on the basis of some 6 years of experience as a Human Relations Consultant in a multidisciplinary social science resource group—including, incidentally, "physical" architecture as a related specialty. The experience has included, in addition to personal counseling with troubled people, consultation on organization, communication, and other interpersonal and personal relationship problems in a variety of natural group contexts. These groups have ranged from the family unit, through social-recreational-service clubs and formally organized semi- and fully commercial enterprises, to neighborhood-community. The services have been performed for the most part with essentially normal people, with the objective of "enabling" them to better achieve their personal or organizational goals.

Kelly offered his suggestion of the Architect image for clinical psychology as an expression of a minority view, and my guess is that his appraisal is correct. However, I suspect that there may be among psychologists generally, and even among clinicians, an appreciable number to whom this concept—with its implied direction of evolution—is appealing. I think it worthwhile to find out. *Toward this end I should like to invite those who are interested to send me their names, addresses, and a return addressed, stamped envelope.* If the response is small, I volunteer to prepare and return a list of respondents. If the response is large, I shall call the matter to the attention of the APA with a request for Social Architectural assistance to help those of us who are interested to design and build a dynamic organization through which we can work with

a sense of some togetherness in advancing this broad concept of the psychologist's professional role and its attendant extremely challenging area of professional-scientific activity. Please address me in care of: Institute of Social and Personal Relations; 338 Grand Avenue; Oakland 10, California.

JACK F. LITTLE  
Walnut Creek, California

### "Psychotherapy's" Autonomy

After reading Astin's recent article (*Amer. Psychologist*, 1961, 16, 75-78) I was left with the vague suspicion that he had marshaled a good deal of scholarly evidence to prove a point that needs no proof. Psychotherapy (and it should be in quotes) is autonomous and serious students of it are giving a good deal of thought, time, and energy to a consideration of its functional properties. Certainly many of the "practitioners" are as unhappy as Astin over the uncertainties involved, but fortunately, unlike Astin they have not washed their hands of the "bothersome business" of outcome or process.

The first issue that needs attention is his opening sentence. Unfortunately, here he gives no reference to indicate how long we have been about the business of attempting to formulate rigorously any test hypotheses about the therapy relationship within that situation itself and in the laboratory as well. In its present form it all began a little over half a century ago and even now there is still much room for new ideas on what is essentially one of our oldest problems, i.e., man's often unhappy relation with his fellow man. As a reference to the problem itself, Astin may check with some Biblical writings (date of first publication uncertain).

The second and final point I wish to make is that it is unnecessary to answer Astin's article point by point. Personally, I think it would be more fruitful to look at the term "psychotherapy" and see in what way he may not have attended to what is perhaps the most important part of the problem he raises. That is, what does it mean to condemn "psychotherapy" when there are so many meanings attached to it, all applied I think by men of general good will who do intend to "provide a service to troubled people."

A layman does not need to look far to know that there are innumerable forms of "psychotherapy," most of which I assume are written about by their innovators in the belief that their particular form of therapy has helped someone. The questions of replicability and outcome raised by Astin are not so unseemly as they are untimely. One wonders by what private criteria Astin himself has chosen this point in time for despairingly contemplating the continued and what he feels is the unwarranted liveliness of interest in "psycho-



therapy" by its practitioners. I personally feel that there is room for even more theories and techniques of "psychotherapy" all of which will hopefully be nourished by naturalistic clinical observations in liberal clinical settings after which time they shall be put to closer test by the researchers "within us."

The question implied in Astin's last parenthetical sentence is partially answered, I feel, at the beginning of his article, i.e., therapists are trying "to provide a service to troubled people." What is of particular interest, of course, is what kind of service? I shudder, as perhaps Astin does, but for different reasons, when I read of therapy serving as a personality research laboratory. If the latter is our main interest then it would be better not to call the process or technique "psychotherapy" and in addition make certain that our subjects are appropriately rewarded, etc.

At this point I would like to say something of how "psychotherapy" serves the patient as it is practiced by the writer. Primarily, I conceive the therapeutic interaction as one in which the patient is afforded the opportunity of a relationship with another person who has no other interest in the patient than to be with him and discuss what is of interest to him at that particular moment in time. It can be seen from this that among other things, therapy here is not conceived of as a situation in which the therapist has an overriding interest in giving the patient "insight" about himself or "understanding" of how he got to be the way he is today, etc. Rather it is felt that a relationship based on helping the patient to recognize his own wishes and interests and helping him to more realistically assume the responsibility for them will be most therapeutic. One thing more, among many others, that can be said to describe this kind of therapy is that it attempts to help the patient recognize the many implied and only partially disguised inconsistencies in his behavior by commenting to him about his own characterological ways of speaking and acting that are un-genuine and conflicted. This is done by the therapist's increased sensitivity to those aspects of behavior in a patient that relate not to content of behavior but to style.

My reasons for outlining some of the premises of therapy as I conduct it are to illustrate, if only briefly, how this form of "psychotherapy" is quite different from other forms such as supportive or uncovering or re-educative techniques of "psychotherapy." To be disillusioned at this point in time with psychotherapy in general and its apparent imperviousness to scientific questioning is to miss the real profundity and variety of relationships that can exist between two people (or several people). That the effect that such a relationship can have on at least one of the two is difficult to measure (both during and after its occurrence in time)

should be obvious to psychologists. My own bias leads me to think that the most fruitful endeavor at this time for psychologists interested in psychotherapy is to stand (excuse this metaphor) at both ends of the barrel of the kind of "psychotherapeutic" experience their hunches and good sense lead them to think is worthy of their investment of time and energy. After such experience I think we will be able to formulate hypotheses and reject on empirical grounds those forms of therapy that are not functionally viable. To take a stand of this kind means that judgment about what is the best form(s) of therapy will have to be suspended if one insists on using the more classical research techniques for verifying psychotherapeutic hypotheses. For the while the practitioner does have to rely on his own subjective and singular experience as to the degree of validity contained in the psychotherapeutic technique of his choice. If "psychotherapy" seems functionally autonomous it may be due to the fact that man and psychologist alike have learned, fitfully and partially, in the course of at least several millenia, that discourse between two people can somehow be beneficial to both or at least one in their effort at achieving greater maturity and autonomy.

DANIEL I. ALEVY

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Satire is a fine art but the seriocomic diatribe, "The Functional Autonomy of Psychotherapy," recently published is only an exercise in cynicism. It is yet to be demonstrated, with adequate outcome controls of course, that cynicism, buttressed on half-truths, benefits anybody.

SAUL ROSENZWEIG

Washington University

### Playing Games

In a recent *Handbook of Research Methods in Child Development* (Mussen, 1960) a subsection "Ethical Problems of Research" (p. 28) disposes of the problem of eliciting preschool children's cooperation in research projects with the following statement: "With preschool children the request to play some games with the experimenter is probably as good as can be done."

Is it?

Since this handbook is "addressed to present and potential investigators—as a basic reference and a guide" let us consider what happens when one of them approaches a preschool child with only this games cliché to guide him. Immediately the experimenter will be struck by the fact that the preschool child is not waiting around for an invitation to "play games" with a psychologist. To the contrary he is likely to be deeply absorbed in a project of his own devising. With



a fireman's hat on his head, a wagon tied to his tricycle, and a length of hose tucked in his belt he is speeding to a four-alarm blaze with accompanying firemen and accompanying sound effects. If the experimenter does not move out of the way he may be a casualty.

Clearly *the outcome of an invitation to "play games" depends on what the invited child is doing at the moment.*

Looking around him at vigorous excavation projects, cooking operations, and ambulance activities in full swing the experimenter may begin to wonder what chance an invitation to play *unspecified* games has against the vivid child-to-child and teacher-to-child invitations to engage in interesting activities developing before the invited children's eyes. Though, recalling his basic reference "in the case of younger children it may be quite impossible to make the child understand the purpose of the experimenter" our experimenter decides to take a chance. He can see as well as any 3-year-old that *the success of an invitation to play games depends on how attractive the proposed game sounds to the invited.*

Polishing his sales pitch to include some account of what activities his game involves the experimenter hopefully approaches an unoccupied girl. She is 4 years of age, an urban child whose mother has warned her never to go off with people she does not know. Even without this advice she shares with most children her age a conservative suspicion of the unfamiliar. It is soon clear to the experimenter that he is going to get nowhere with this girl without an introduction. His basic reference with the statements "children are half human half animal" and "in terms of traditional research operations somewhere between animals and adults" serves no warning that *a child's willingness to play games with an adult depends in part on how well the child knows the adult, and how favorably.*

Not all girls say no, despite their mother's advice so it is possible that the experimenter will eventually get a little girl's hand in his—but not for long. When it becomes clear to the child that the games are to be played in some place unknown to her it is a fairly safe bet that she will balk before leaving the familiar nursery school surroundings. *Invitations to play games are, as the experimenter can now see, more likely to be accepted when the games are played in a familiar place with some of the same inviting quality as the preschool.*

This, however, is not all the experimenter has to learn. He has yet to approach 4-year-old games veterans who meet his invitation with a calculating: "What do we get?" Having previously endured a tedious learning game merely to get a handful of trinkets they are not to be had for the asking but may consider bargaining on their own terms. Clearly *children's past*

*experiences with playing games affects their response to a gamesy experimenter.*

At this point, when the experimenter may well feel he has had games playing, he meets a child who feels the same way. The child refuses his invitation politely and firmly explains that he has played games today, yesterday, or whenever, and that he intends to play right where he is. After all it is a poor preschool in which experimenter's games are, in general, more interesting than the activities of the preschool.

With this final rebuff our experimenter might sum up his conclusions much as follows: a preschool child's response to an experimenter's request to play some games depends on what the child is doing when the request is made, on how well and favorably he knows the experimenter, on how attractive the games appear to him, on his familiarity with and feeling about the games room, on his past experience with games, and on the number of times he has recently been asked to forego his own activities to cooperate in those of the experimenter.

But is this what a rebuffed experimenter concludes? If it were, some hint of his conclusions would surely appear in the basic reference.

What is more likely is that during his unsuccessful encounters with preschool children the experimenter notes the relative ease with which the nursery school teacher interacts with the children and decides to bypass his difficulties by having her withdraw the children for him. What happens then?

Does he cajole or coerce the teacher into supplying him, against her better judgment, with a steady stream of children regardless of what activities have to be interrupted and if so what does he learn and what does he lose in the way of experience and understanding and what is the effect on the children, the teacher, and the function of the nursery school?

Since these inquiries are more likely to embarrass than enlighten, let us consider instead what *could* be done to make games players more perceptive and games playing more productive. The need for such consideration is implicit in the preface to the *Handbook of Research Methods in Child Psychology*. There, the Editor notes wistfully: "Research in this field since the mid-twenties has not generally improved in quality or increased in quantity as much as research in many other scientific disciplines." In another section of the handbook, a contributing author enjoins: "We must understand [children] . . . somewhat even to conduct research with them." No clue is given though as to how this is to be accomplished.

Though there is indeed no sure formula for understanding children—even somewhat—there is something that can be done to increase the probabilities that a potential experimenter will develop some understanding

of preschool children's behavior before he conducts research with them.

*Preparatory Course in Participant Observation.* Experimenting with preschool children calls for skill in interacting with them as well as some understanding of them. Since an experimenter's future observations of children's behavior will generally take place under circumstances in which he is a participant systematic training in observing while participating can help him become more sensitive to the various elements in a behavior episode—the behavior setting and the participant observer's actions as well as those of the child.

What makes a preschool admirably suited to this purpose is that the children, to a great extent, create the behavior settings which have meaning for them—something quite different from an experimenter creating behavior settings that have meaning for him. It is the children who decide that a wagon load of dirt is a poison consignment for putting on flies or that a packing box and pole are a fire or service station, calling for actions and accessories appropriate to such a setting.

As the experimenter moves unobtrusively and helpfully among them, accepted as a collaborator and "teacher," he cannot help learning something about children's behavior. If he compares his perception and recall of an episode with that of a companion observer behind a screen or with a televised film of the episode's action, he can sharpen his perception and recall. The value of such participant observation shines through in the writings of Susan Isaacs and Jean Piaget. Though participant observation will not of itself produce an Isaacs or a Piaget, without participant observation, nothing else will.

A fringe benefit of this experience is the ideas the experimenter will get for his own games. As a simple illustration from my own experience: Incidental observation of the ways 3- and 4-year-olds used the cylindrical and rectangular building blocks of different sizes, suggested their possibilities in family representation. This led to a game that furnished a record of the order in which family members were built (by each child), their relative heights and block complexity, their cylindrical or rectangular character, and their positions relative to each other. The children enjoyed this game, and as a publication in preparation will reveal, it helped to throw some light on their concepts of family status.

*Preparatory Period in Any Preschool from Which Children Are to Be Withdrawn.* Given experience in participant observation, a potential experimenter can appreciate the need for spending a preparatory day or two in any preschool group from which he hopes to withdraw children. Time spent in getting acquainted not only saves time in the withdrawal process, it favors a freer response from the children in the games situa-

tion itself. Since it gives the teacher an informal opportunity to introduce the experimenter he is able to tell the children about his game and show them some of the games materials and the place where the game will be played. Again illustrating from my own experience: Last year on a research project in New Zealand, I spent part of a get-acquainted period sitting on the fringes of a 4-year-old music group. After a song and some drum beating about Indians, the teacher looked and smiled in my direction. "We have a visitor from Indian country," she said. "Maybe she can tell us about the Indians she knows." Thanks, in part, to a summer in Taos, from then on I was "in." I arrived each morning to a greeting of "me first" or "my turn next." As each child finished his turn, he passed the word to the next in line. It helps to do something for children before asking them to do something for you.

*Consideration for the Characteristics of the Games Room.* Other factors that affect the outcome of games playing are perhaps not as much under the individual experimenter's control. One of these is the character of the games room and the children's association with it. Again illustrating from my own experience: In a children's play center, from which I decided not to withdraw children, the only room available for games was one used for giving inoculations. Since many centers, where preschool children gather, have no adequate games room facilities, a trailer or mobile unit, attractively equipped for such a purpose, is worth considering.

Freedom from unpleasant association is, however, not the only prerequisite for a games room. Many now in use and designed for this purpose, have the stark compelling character of a line-up room at police headquarters. A games room should be at least as attractive to children as the preschool from which they are withdrawn.

*Pretesting and Scheduling Games in Consultation with the Preschool Staff.* Since one poorly conceived experiment conducted by a graduate student or faculty member who is inept in interacting with children, can produce protesting resistance to games for weeks, the length of time a game requires, its appeal or lack of appeal for the children, and the materials and directions it involves, all deserve careful consideration. Talking these over with a preschool teacher who has years of experience in working with young children can conserve the time, effort, and good will of all concerned.

Since parents pay preschool fees for their children's education, not for their cooperation in experiments, careful scheduling of games playing is necessary in consultation with the preschool staff in advance of each semester. Experimenters' desire to use the children should be balanced against the children's desire to use the preschool facilities. Only in this way can withdrawal demands be kept within the children's tolerance.

Preparation for playing games thus involves a little more than acquiring a stereotyped request. A potential experimenter can be helped by preparatory training in participant observation, by a preparatory get-acquainted period in any preschool from which children are to be withdrawn, by having available an inviting games room, and by pretesting and scheduling games in cooperation with preschool staff members.

As for the injunction to understand children—somewhat—before conducting research with them, Rogers and Hammerstein are more helpful. As Anna in the *King and I* makes lyrically clear, understanding children is largely a matter of: getting to know them, getting to like them, when you are with them getting to know what to say, seeing it their way, as well as putting it your way, but nicely.

CATHERINE LANDRETH  
University of California, Berkeley

### What's in a Name?

The necessity of cross-validating the results of an item analysis has been cogently and humorously demonstrated by Cureton (*Educ. psychol. Measmt.*, 1950, 10, 94-96). By using more predictor items than subjects and by computing his validity coefficient on the original group, Cureton obtained a validity coefficient of .82, although his test-retest reliability was only -.06. The criterion was the grade point average of 29 students, and the predictor items were 85 numbered tags which were thrown randomly on the table for each subject.

The writer undertook an experiment which was designed to be equally illustrative of the importance of cross-validation, but which used a somewhat different design. The "test" in this case consisted of a checklist of 81 adjectives describing personality and 22 items relating to personal characteristics, habits, and preferences. The subjects were 59 students in an introductory psychology course at Cornell University.<sup>1</sup> Twenty-nine subjects' tests were chosen at random from this group for preliminary analysis, and the remaining 30 were put aside as the cross-validation group. The answers to the group of 22 items were examined to find an item which split the group of 29 nearly in half. The "number of letters in last name" was chosen as the criterion solely on this basis, leaving a total of 102 predictor items. The criterion was dichotomized between six or less, and seven or more letters.

Tetrachoric correlations were computed between each item and the criterion for the group of 29. Discriminant weights were arbitrarily assigned to each item that

correlated .36 ( $p < .05$ , two-tailed test) or better with the criterion. Using this scoring key, 27 out of 29 correct "predictions" were made as to the number of letters in each subject's last name. The over-all tetrachoric correlation was .97, although the split-half reliability coefficient was only .67.

Those subjects with long (seven or more letters) last names tended to be *less*: charming, impatient, stimulating, gay, happy-go-lucky, and impulsive than those with short (six or fewer letters) last names. The subjects with long last names also tended to be *more*: cautious, persistent, forgiving, quiet, kind, persuasive, talented, direct, humane, conservative, precise, and God-fearing. They also tended: either not to smoke or to use filters, to have 16 or more fillings in their teeth, to like vodka, to have fewer letters in their first names than their mothers', to have hair of different color than their fathers', and to have seven or more letters in their middle names.

The results suggested that if the procedure were reversed, and the criterion were used as a predictor, it might have great promise as a quick, economical, and unfakeable personality test; the results, of course, would also have far-reaching implications for cigarette manufacturers, dentists, and vodka salesmen. Unfortunately, when the scoring key was cross-validated on the remaining 30 subjects, only 14 were correctly classified as to length of last name. The over-all tetrachoric correlation was  $-.08$  ( $p > .10$ ).

EDWIN A. LOCKE  
Cornell University

### Michigan Certification of School Psychologists

The letter entitled "A Correction and an Addition" appearing on page 84 of the February 1961 *American Psychologist* refers to an article appearing in the June 1960 *American Psychologist* entitled "State Certification of School Psychologists." It is suggested that "for the University of Michigan" Table 1 on page 347 of the article should be corrected. There are no entries in the table mentioned which refer to the University of Michigan. The data to which reference is made were obtained through correspondence with the officer responsible for certification in the Michigan State Department of Public Instruction and were certified to be correct by said officer as late as January 1960. The article clearly stated these facts.

The fact that school psychologists trained at the University of Michigan are approved by the State Department of Public Instruction is perhaps indicative of the University of Michigan's leadership role in providing new approaches to the training of these professionals.

WALTER L. HODGES  
George Peabody College for Teachers

<sup>1</sup> The writer would like to express his appreciation to Patricia C. Smith of Cornell University for permitting her class to serve as subjects for this experiment, and for aiding in the design and write-up of this study. The author is, however, entirely responsible for the contents of this paper.



# Psychology in Action

## WHO IS A PSYCHOLOGIST IN CALIFORNIA?

IN 1957 the Legislature of the State of California passed a Psychology Certification Act. This act permitted anyone in the state who asserted he was rendering psychological services to continue to render such services provided he registered with the Psychology Examining Committee, a seven-person committee appointed by the Governor to administer the act. This committee functions within, but is virtually independent of, the State Board of Medical Examiners.

No educational, training, or experience standards were required for registering with the committee. The intent of the law was to permit any person who was earning a livelihood by practicing whatever it was he might have been practicing under the heading of psychology, to continue his practice until October 1, 1965. At that time (1965), in order to continue to hold themselves out as psychologists, these persons must meet the standards for certification.

To distinguish between these "registered persons" who satisfy no minimum educational and experience standards, and persons with some training and qualifying professional experience, the act established another title, namely, "certified psychologist." (As of November 1960, there were 702 persons who registered as psychologists under this act but who were not certified psychologists.)

This act defines a psychologist and psychological services as follows:

### I. Definition of Psychology and Psychologist

2903. A person represents himself to be a "psychologist" within the meaning of this chapter when he holds himself out to the public by any title or description incorporating the words "psychological," "psychologist" or "psychology" and under such title or description offers to render or renders psychological services for remuneration.

The term "psychological services," as used in this chapter, refers to any services if the words "psychological," "psychologist" or "psychology" are used to describe the services by the person rendering or offering to render them.

2903.5. The practice of psychology is defined as the application of established principles of learning, motivation, perception, thinking, and emotional relationships to problems of personnel evaluation, group relations, and behavior adjustment, by persons trained in psychology. The application of said principles includes, but is not restricted to, counseling and the use of psychotherapeutic measures with persons or groups with adjustment problems in the areas of work, family, school, and personal relationships; measuring and testing of personality, intelligence, aptitudes, and skills; and doing research on problems relating to human behavior.

Nothing contained in this section shall in any way restrict any person from carrying on any of the aforesaid activities; provided, that such person does not represent himself as a psychologist as specified in Section 2903 unless he is certified under this chapter.

From September 11, 1957 to September 11, 1959, application for grandfathering as a certified psychologist was permitted under the act. The essential requirements for certification under grandfather provisions were either: (a) a doctoral degree in psychology or educational psychology or some equivalent, plus 3 years of professional experience of a type considered qualifying by the Psychology Examining Committee; (b) a master's degree in psychology or educational psychology or equivalent; (c) any bachelor's degree, plus 15 years of qualifying professional experience; (d) a valid school psychologist's credential; (e) civil service status as a psychologist attained via passing an examination.

Now that the provision of the so-called "grandfather clause" has been closed, who have been certified as psychologists in California? In Table 1 are the tabulated statistics for the 2,424 persons who qualified for certification without examination.

TABLE 1

CHARACTERISTICS OF PERSONS CERTIFIED  
WITHOUT EXAMINATION

Sex:	
Male .....	1,758
Female .....	666
Age:	
21-25 .....	7
26-30 .....	154
31-35 .....	571
36-40 .....	615
41-45 .....	405
46-50 .....	260
51-55 .....	187
56-60 .....	104
61-65 .....	62
66-70 .....	39
71-75 .....	13
76-80 .....	6
81-up .....	1
Birthplace:	
Native born .....	2,216
Foreign born .....	208
California born .....	408



TABLE 1 (Continued)  
CHARACTERISTICS OF PERSONS CERTIFIED  
WITHOUT EXAMINATION

Years resident in California:	
0-1 .....	57
1.1-5 .....	638
6-10 .....	397
11-15 .....	475
16-20 .....	158
21-25 .....	116
26-30 .....	91
over 30 .....	466
Nonresident .....	26
Basis of certification:	
Education and experience .....	1,530
School psychologist credential .....	631
Civil Service .....	263
Degrees held:	
PhD .....	1,133
EdD .....	148
MA .....	785
MS .....	193
MEd .....	42
MSW .....	2
LittM .....	3
BS .....	18
BA .....	87
Foreign MD (not used) .....	5
Training equivalent to BA or BS .....	8
Type of present work:	
Educational institutions	
Teaching—	
university or 4-year college .....	370
junior college .....	69
high school .....	23
Research .....	84
Counseling and guidance .....	131
School psychologist with credential .....	504
	(49%) 1,181
Hospitals and correctional institutions	
Government hospital .....	227
Private hospitals .....	29
Correctional .....	70
	(13%) 326
Organizations	
Military .....	67
Federal .....	51
State .....	38
City or county .....	51
Private corporation .....	81
Religious .....	10
Nongovernmental local community welfare agency .....	11
	(13%) 309

Private practice	
Individual or group counseling .....	352
Marriage counseling .....	18
Consultation with industrial personnel or human factors research .....	198
Remedial work on school subjects .....	15
Miscellaneous .....	3
	(24%) 586
Miscellaneous—housewives, writer, lecturer, unemployed .....	
	(01%) 22
Memberships:	
American Psychological Association .....	1,726
California State Psychological Association .....	682
American Board of Examiners in Professional Psychology .....	169

Thus, among the 2,424 persons who were judged qualified for certification under grandfathering provisions, 71% were APA members; 53% held a doctoral degree in psychology or in educational psychology and another 42% held master's degrees. It is difficult to tell accurately what percentage engage in private practice, because aside from the 24% who so indicated, there is reason to believe that many persons whose primary professional affiliation is with an institution or organization, undertake in addition some amount of part-time practice or private consultation.

It might be of particular interest to know the type of work engaged in by the 118 grandfathers who were certified with less than a master's degree. Their occupational distribution is shown in Table 2.

Two tasks which faced the Psychology Examining Committee in its evaluation of applications for grandfathering certification proved especially difficult. One problem was the determination of "professional experience of a type considered qualifying by the committee." When a person with a bachelor's degree has practiced psychology for 15 years or more, under what circumstances is such practice deemed qualifying? Under what circumstances might it in effect be considered malpractice for 15 years—and therefore many times worse than if he had practiced only one year when he probably was not properly qualified to practice independently in the first place? What sort of supervision, and for how long, might be reasonable as a working guide to determine whether experience might be counted as "qualifying"?

A second problem was the evaluation of equivalency. Is a master's degree in an allied profession, for example, equivalent to a master's in psychology? If persons from another profession were being certified and a person with a master's in psychology applied for certification, would the members of the other profession regard the psychology master's as equivalent? Is a master's in speech therapy, or in sociology, or in

TABLE 2

OCCUPATIONAL DISTRIBUTION OF THOSE CERTIFIED  
WITH LESS THAN A MASTER'S DEGREE

Educational institutions:	
Teaching—	
{ university or 4-year college .....	2
{ junior college .....	1
{ high school .....	1
Research .....	4
School psychologist with credential .....	19
	27
Hospital and correctional institutions:	
Government hospital .....	20
Correctional .....	18
	38
Organizations:	
Military .....	11
Federal .....	5
State .....	3
City or county .....	4
Private corporation .....	1
Religious .....	1
	25
Private practice:	
Individual or group counseling .....	22
Marriage counseling .....	1
Consultation with industrial personnel or human factors research .....	2
Remedial work on school subjects .....	3
	28

theology with an emphasis on pastoral counseling, equivalent to a master's in psychology?

The committee met these problems by hammering out (a) a concept of what might constitute "suitable supervised professional experience," and (b) standards for evaluating equivalency. These tasks proved to be difficult, and resulted in the following current regulations:<sup>1</sup>

*Criteria for Evaluation of Education Deemed Equivalent to a Doctorate Degree in Psychology or Educational Psychology*

1. Applicants for certification whose applications are based on equivalent training pursuant to Section 2941

<sup>1</sup> The regulations cited herein are those which the Psychology Examining Committee adopted after the "grandfathering" provisions of the law expired, and applicants for certification are required to demonstrate that they meet the requirements for examination. Readers who may be interested in learning how suitable professional experience and educational equivalency were evaluated for "grandfathering" purposes can obtain this detailed information by writing to: Wallace W. Thompson, Executive Secretary; Psychology Examining Committee; Sacramento, California.

(4) of the Code shall meet the following criteria: Possess a doctoral degree in social, behavioral, or biological science from a training institution approved by the committee in which at least 40 semester hours of course work at the graduate level were passed successfully and were clearly identified by title and content to be psychological in nature. Part of the standards for issuance of said degree must require the submission of an original research thesis which must be psychological in nature as determined by the Psychology Examining Committee.

2. Graduates of foreign universities are excluded from the provisions of this regulation and the criteria for the evaluation of their formal education are covered under Regulation No. 1385.

*Foreign Graduates*

Applicants for certification whose applications are based on graduation from foreign universities shall provide the committee with such documents and evidence tending to establish that their formal education is equivalent to a doctoral degree in psychology or educational psychology granted by a school approved by this committee. The applicant shall provide the committee with the following:

1. An original diploma or other certificate of graduation which will be returned and photostatic copies of all these documents which will be retained

2. A transcript or comparable document of all course work completed

3. A certified translation of all submitted documents if they are in any language other than English

4. A statement prepared by the applicant based on the above documents, indicating the chronological sequence of studies and research. The format of this statement shall be as comparable as possible to a transcript issued by American universities.

*Criteria for Evaluation of Experience*

Compliance with the following requirements shall be deemed minimal requirements of "suitable supervised professional" experience as set forth in Section 2591 (5):

1. The applicant's supervised experience shall have been in the same or similar field of psychology as was the applicant's education and training.

2. A year of experience shall have consisted of not less than 1,500 clock hours which shall have been completed within 24 consecutive calendar months.

3. The supervised experienced shall have provided for a minimum of one hour per week of face-to-face or similarly effective consultation between the supervisor and the applicant during its entire duration. A statement from the supervisor verifying the applicant's

supervised experience and setting forth the nature and extent of such supervision shall be required. Such statement shall verify that the applicant's performance was in accordance with adequate professional standards required of psychologists.

4. The supervisor of the applicant must have acquired prior to the period of supervision a doctoral degree in psychology or educational psychology or the equivalent.

5. a. The supervisor must have had prior to the period of supervision 3 years of professional experience of a type deemed qualifying by the committee. A statement from the supervisor outlining such experience shall be required.

b. The teaching of psychology may count for one-half of the one year of experience providing that such teaching shall have been in courses in the same or similar field of psychology as the experience.

c. The supervised experience may have occurred either before or subsequent to the completion of the doctorate. If it occurred prior to the doctorate, the applicant must have completed 2 full academic years of graduate training in psychology of not less than 48 semester units before any of the supervised experience is counted.

d. The experience may have taken place in any doctoral level training program presently or hereafter approved by the American Psychological Association for specialty training in applied psychology.

e. Independent private practice of the applicant alone shall not be considered as an adequate setting for the acquisition of a year of suitable supervised experience.

Since September 11, 1959, it has been necessary for all applicants for certification to pass a written and an oral examination. Eligibility to take this examination demands that a person hold a doctoral degree in psychology or in educational psychology and that he shall have engaged for at least one year in suitable supervised professional experience as determined by the committee.

Current requirements of a doctoral degree in psychology or educational psychology or equivalent plus a year of qualifying experience in order to take the certification examination, have shifted the main problem from the evaluation of credentials to the development of an appropriate examination. The first certification examination in California was given in June 1960, and the second in October 1960. The philosophy guiding construction of the written examinations has been to avoid duplicating university doctoral examinations in psychology and to measure instead the ability to

integrate and apply basic knowledge and ethical sensitivity to case problems in clinical, counseling, industrial, social, educational, engineering, and experimental psychology. Approximately two-thirds of the weight has been given to essay or case questions and one-third to objective-type questions such as sentence completion. The objective-type questions deal with basic knowledge of perception, motivation, learning, thinking, etc.

At the time of this writing—November 1960—two written and oral certification examinations have been given, the first to 16 candidates and the second to 15. Of these, 29 have passed and 2 have failed. The type of work in which these 31 persons were engaged was reported as shown in Table 3.

TABLE 3  
REPORTED WORK EXPERIENCE OF CANDIDATES  
FOR EXAMINATION

Educational institutions:	
Teaching—university or 4-year college .....	2
Research .....	1
Hospitals:	
Government hospital .....	8
Private hospital .....	2
Organizations:	
Federal .....	4
State .....	2
City .....	1
Private practice:	
Individual or group counseling .....	3
Consultation with industrial personnel or human factors research .....	8
	31

The California Psychology Examining Committee now has been through 3 years of learning and trying to do the best job it could in administering this new law. Some things we clearly recognize in hindsight might have been done better; others we may not recognize. Questions, suggestions, and criticisms from the profession truly are welcome!

CALIFORNIA STATE PSYCHOLOGY  
EXAMINING COMMITTEE

HUGH M. BELL  
EDWARD M. GLASER, *Chairman*  
THOMAS W. HARRELL  
NORMAN B. HENDERSON  
ROBERT G. KAPLAN  
HARRY C. MAHAN  
E. PAUL WELCH

## THE APA PROGRAM OF VISITING SCIENTISTS:

1960-61

SHERMAN ROSS<sup>1</sup>*APA Education and Training Board*

THE 1960-61 academic year was the first year of a Visiting Scientist Program supported by the National Science Foundation. Nearly 130 psychologists packed their bags, and set out to visit colleges to talk about psychology. They put aside research, teaching, and administrative activities and took to the road. This program is arranged by the Board of Scientific Affairs and the Education and Training Board, both of which are concerned with the improvement of teaching of psychology in the colleges and with the importance of psychology as a science.

The program has the following major objectives: to stimulate interest in psychology at the collegiate level, to provide an opportunity to college staff members and major students at smaller institutions to consult with and be advised by leaders in psychological science, to stimulate students to consider careers in psychology and in the teaching of psychology, and to introduce psychology to smaller institutions where psychology is not now taught.

It is clear that a number of psychologists as individuals engage in lecture tours, and some of these objectives are accomplished in part. In general, however, such lecture trips occur when there is both an interest in psychology and financial support. Under the NSF program it was possible for outstanding psychologists, representing the range of interest and application of our science, to visit colleges which might not otherwise be able to afford such a program from their own resources.

Geographical controls were used both for financial and convenience reasons. For the first year we concentrated on the smaller colleges of more than 500 students, awarding only the bachelor's degree, who have or who are planning courses or major sequences in psychology. Some institutions, for example, might provide psychology courses without a psychologist as a staff member, others might have one- or two-man staffs, and might be considering expansion. We did not provide visitors for the teacher training institutions or for the technical schools.

Over 548 such bachelor degree granting institutions were sent an invitation in addition to a description of

the program in the early fall of 1960. Applications were received, and visitors were assigned on a geographical basis, matching free times and specialty preferences so far as possible.

The visiting scientist made himself available to the institution in a variety of ways, depending on the needs of the institution. The visitor engaged in general public lectures, class lectures, seminars, or informal discussions. The visiting scientist was also available for student conferences and for faculty and administrative advice on aspects of scientific psychology and its teaching.

Procedural details were developed in consultation with officers of other scientific organizations with longer experience in similar programs. The plan of operations involved two simultaneous activities: securing lecturers, and inviting colleges to participate in the program. The first step was to select a sizable number of universities and research centers as the sources of prospective visitors. A letter was written to the department chairman or the director describing the program and requesting nominations. These nominations were followed by invitations to the individual. We proposed the program to NSF on the assumption that our colleagues would be willing to visit these colleges; interact with students and faculty and staff; and contribute their skill, time, and energy to these colleges. We were quite correct in this assumption. Almost 200 psychologists volunteered. In order to minimize the demand, no visitor was sent to more than one college. The names of the colleges and the visitors are listed in Table 1.

Reports from the colleges, written after the departure of the visiting scientist, were quite uniformly favorable and many were enthusiastic. The colleges appeared to be genuinely impressed by the willingness of these scientists to visit them and to carry out a variety of tasks. Many kinds of questions were answered and follow-up aid was provided. There was some concern at the beginning of the program as to whether these psychologists, some of whom were far removed from undergraduate teaching, would "fit in." The colleagues need not have worried: the visitors fitted in very well indeed.

The visitors also wrote reports. Some reports were brilliantly composed, incisive documents describing the

<sup>1</sup> John I. Lacey, Wayne H. Holtzman, John G. Darley, and Sherman Ross were members of the planning committee.



situation in a given institution. Other reports described needs in personnel, space, libraries, and equipment. Some visitors were impressed with the responsiveness of students and faculty. Other visitors were depressed by the relatively heavy teaching loads, the lack of research funds, and the problems related to recruitment and retention of staff members. The perceived role of psychology in the family of sciences appeared as a problem to be overcome in some institutions. Comments were made in a constructive fashion on the scarcity of modern equipment, on the lack of books and periodicals, and the need for revision and development of the undergraduate curriculum, usually the introductory course. These comments were usually accompanied by excellent suggestions for improvements made to the institutions.

It would be incorrect to indicate only the difficulties facing the colleges. The visiting scientists were pleased with the responses of many students, who were eager to talk about psychology, graduate study, and jobs. The visitors became acquainted with college teachers who were doing an excellent job of teaching and who were aware of recent developments. The solution to the problem of staffing the colleges is one which must be faced directly, but this is not the place to consider the problem. The problems related to research development in the colleges may be met by further dissemination of information on presently available support programs, and by institute-type programs for college psychology teachers, where down-to-earth detailed plans for course content and techniques could be shared.

There was a personal side to the visits. If anyone thinks of them as 2-day or 3-day holidays, he is mistaken. The visiting scientists worked from arrival to departure on full schedules; a few of them appeared to be overfull, in spite of a suggestion to the college to give the visitor a chance to rest.

As in many other aspects of education, the criteria of effectiveness are difficult to isolate. We can be confident of a few items. The efforts of our colleagues are certainly for a good purpose. If only a few first rate scientists are attracted to psychology, if a larger number of citizens know what a scientist in psychology looks like, talks like, and even thinks like, the result is worth the effort.

The APA Visiting Scientist Program would not have been possible without the generous support of NSF. With additional support from the foundation, we will continue this program to reach a wider range of undergraduate institutions for the next few years.

TABLE 1  
COLLEGES VISITED IN THE 1960-61 APA VISITING  
SCIENTIST PROGRAM

College	Visitor
Adrian College Adrian, Michigan	Louis L. McQuitty Michigan State University
Alderson-Broadus College Philippi, West Virginia	Richard L. Krumm American Institute for Research
Alma College Alma, Michigan	Jack A. Adams University of Illinois
Aquinas College Grand Rapids, Michigan	Stanley C. Ratner Michigan State University
Arkansas Polytechnic College Russellville, Arkansas	John F. Santos Menninger Foundation
Augsburg College Minneapolis, Minnesota	Howard Shevrin Menninger Foundation
Bates College Lewiston, Maine	J. M. Notterman Princeton University
Bellarmino College Louisville, Kentucky	Shepard Liverant Ohio State University
Bennett College Greensboro, North Carolina	Edward E. Jones Duke University
Bennington College Bennington, Vermont	Irwin Katz New York University
Berea College Berea, Kentucky	Eugene H. Galanter University of Pennsylvania
Bethany College Bethany, West Virginia	Richard L. Solomon University of Pennsylvania
Bridgewater College Bridgewater, Virginia	J. W. Kling Brown University
Carleton College Northfield, Minnesota	Vincent G. Dethier University of Pennsylvania
Carroll College Waukesha, Wisconsin	M. Ray Denny Michigan State University
Carson-Newman College Jefferson City, Tennessee	Walter F. Grether Behavioral Science Laboratory Wright-Patterson Air Force Base
Carthage College Carthage, Illinois	Donald R. Peterson University of Illinois
Central State College Wilberforce, Ohio	Delos D. Wickens Ohio State University
Chatham College Pittsburgh, Pennsylvania	Emory L. Cowan University of Rochester
Citadel, The Charleston, South Carolina	Louis D. Cohen Duke University

TABLE 1 (Continued)

COLLEGES VISITED IN THE 1960-61 APA VISITING SCIENTIST PROGRAM		College	Visitor
Clark College (Also Morehouse College Morris Brown College Spelman College) Atlanta, Georgia	Irwin Jay Knopf University of Texas	Gordon College Beverly Farms, Massachusetts	Vincent Nowlis University of Rochester
Clarke College (Also Loras College) Dubuque, Iowa	Don Lewis State University of Iowa	Goshen College Goshen, Indiana	G. Robert Grice University of Illinois
College of Notre Dame of Maryland Baltimore, Maryland	Edith D. Neimark New York University	Greensboro College Greensboro, North Carolina	Robert E. Ebel Educational Testing Service
Concordia College Moorehead, Minnesota	Buford Steffire Michigan State University	Greenville College Greenville, Illinois	William W. Farquhar Michigan State University
Concordia Senior College Fort Wayne, Indiana	Eli Saltz Wayne State University	Hanover College Hanover, Indiana	Lloyd G. Humphreys University of Illinois
Culver-Stockton College Canton, Missouri	Roy M. Hamlin University of Illinois	High Point College High Point, North Carolina	Wimburn L. Wallace Psychological Corporation
Dakota Wesleyan University Mitchell, South Dakota	Michael Wertheimer University of Colorado	Hiram College Hiram, Ohio	Harry J. Jerison Antioch College
Davis & Elkins College Elkins, West Virginia	William H. Helme Human Factors Research Branch Department of the Army	Hope College Holland, Michigan	Paul Bakan Michigan State University
Dickinson College Carlisle, Pennsylvania	J. McVicker Hunt University of Illinois	Humboldt State College Arcata, California	Lawrence R. Zeitlin Dunlap and Associates
Doane College Crete, Nebraska	Collins W. Burnett Ohio State University	Inter-American University of Puerto Rico San German, Puerto Rico	Wilbert J. McKeachie University of Michigan
Dominican College Racine, Wisconsin	John W. French Educational Testing Service	Iowa Wesleyan College Mount Pleasant, Iowa	Alfred B. Heilbrun, Jr. State University of Iowa
Dubuque, University of Dubuque, Iowa	Abram M. Barch Michigan State University	King College Bristol, Tennessee	Richard H. Gaylord American Institute for Research
Emporia, College of Emporia, Kansas	Rudolph W. Schulz University of Iowa	Knox College Galesburg, Illinois	O. Hobart Mowrer University of Illinois
Eureka College Eureka, Illinois	Albert I. Rabin Michigan State University	Knoxville College Knoxville, Tennessee	Henry Weitz Duke University
Evangel College Springfield, Missouri	Herbert F. Wright University of Kansas	Lafayette College Easton, Pennsylvania	Howard Gulliksen Educational Testing Service
Findlay College Findlay, Ohio	Clarence Leuba Antioch College	Lake Forest College Lake Forest, Illinois	Edmund T. Klemmer International Business Machines Research Center
Gettysburg College Gettysburg, Pennsylvania	George K. Bennett Psychological Corporation	La Salle College Philadelphia, Pennsylvania	Charles N. Cofer New York University
Glenville State College Glenville, West Virginia	John T. Dailey American Institute for Research	La Verne College La Verne, California	Walter L. Wilkins United States Navy Medical Neuropsychiatric Research Unit
		Lebanon Valley College Annville, Pennsylvania	E. E. Moyer Carnegie Institute of Technology
		Lincoln University Lincoln, Pennsylvania	John L. Kennedy Princeton University

TABLE 1 (Continued)

COLLEGES VISITED IN THE 1960-61 APA VISITING  
SCIENTIST PROGRAM

College	Visitor
Little Rock University Little Rock, Arkansas	Julien M. Christensen Aerospace Medical Laboratory Wright-Patterson Air Force Base
Livingstone College Salisbury, North Carolina	Norman Guttman Duke University
Loras College	(See Clarke College, Du- buque, Iowa)
Lycoming College Williamsport, Pennsylvania	Joel R. Davitz Columbia University
Marian College Indianapolis, Indiana	Harold H. Anderson Michigan State University
Marymount College Tarrytown, New York	Laurance F. Shaffer Columbia University
Mary Washington College, University of Virginia Fredericksburg, Virginia	John H. Flavell University of Rochester
McKendree College Lebanon, Illinois	Hjalmar Rosen University of Illinois
McPherson College McPherson, Kansas	Roger G. Barker Midwest Psychological Field Station
Mercy College Detroit, Michigan	Ross Stagner Wayne State University
Milwaukee-Downer College Milwaukee, Wisconsin	Gerald Rosenbaum Wayne State University
Monmouth College Monmouth, Illinois	Harry C. Triandis University of Illinois
Morehouse College	(See Clark College, Atlanta, Georgia)
Morris Brown College	(See Clark College, Atlanta, Georgia)
Mount Angel Seminary Saint Benedict, Oregon	John S. Helmick Educational Testing Service
Mount Marty College Yankton, South Dakota	Ernest A. Hirsch Menninger Foundation
Mount Saint Scholastica Atchison, Kansas	Donald T. Shannon University of Illinois
Muhlenberg College Allentown, Pennsylvania	Harold Seashore Psychological Corporation
Nasson College Springvale, Maine	Lorrie A. Riggs Brown University

College	Visitor
Nebraska Wesleyan Univer- sity Lincoln, Nebraska	Kenneth R. Hammond University of Colorado
Newton College of the Sa- cred Heart Newton, Massachusetts	Howard A. Moss Fels Research Institute
North Central College Naperville, Illinois	Winfred F. Hill Northwestern University
Ouachita Baptist College Arkadelphia, Arkansas	Philip S. Holzman Menninger Foundation
Panhandle A and M College Goodwell, Oklahoma	Richard Ryle Stephenson State University of Iowa
Portland State College Portland, Oregon	Ralph R. Canter System Development Corpo- ration
Ricker College Houlton, Maine	Kenneth A. Chandler Yale University
Rocky Mountain College Billings, Montana	Riley W. Gardner Menninger Foundation
Rollins College Winter Park, Florida	Wilsie B. Webb University of Florida
Rosary Hill College Buffalo, New York	Bernard R. Corman Michigan State University
Sacred Heart Dominican College Houston, Texas	Russell M. Church Brown University
Saint Anselm's College Manchester, New Hampshire	Albert H. Hastorf Dartmouth College
Saint Augustine's College Raleigh, North Carolina	Alfred F. Smode Dunlap and Associates
Saint Benedict's College Ferdinand, Indiana	Charles M. Solley Wayne State University
Saint John Fisher College Rochester, New York	Byron A. Campbell Princeton University
Saint Mary-of-the-Woods College Saint Mary-of-the-Woods, Indiana	David Asdourian Wayne State University
Saint Norbert College West De Pere, Wisconsin	Stanley Stark University of Illinois
Saint Olaf College Northfield, Minnesota	Henry Clay Smith Michigan State University
Salem College Salem, West Virginia	Richard Trumbull Office of Naval Research
San Fernando Valley State College Northridge, California	Evan W. Pickrel American Institute for Re- search

TABLE 1 (Continued)

COLLEGES VISITED IN THE 1960-61 APA VISITING  
SCIENTIST PROGRAM

College	Visitor	College	Visitor
Seton Hall College Greensburg, Pennsylvania	Donald E. Super Columbia University	Union University Jackson, Tennessee	Roland Waters University of Florida
Shaw University Raleigh, North Carolina	Richard H. Henneman University of Virginia	Upper Iowa University Fayette, Iowa	Ronald S. Wilson State University of Iowa
Simpson College Indianola, Iowa	Donald M. Johnson Michigan State University	Ursinus College Collegeville, Pennsylvania	B. von Haller Gilmer Carnegie Institute of Tech- nology
Skidmore College Saratoga Springs, New York	Frances L. Clayton Brown University	Viterbo College La Crosse, Wisconsin	William J. McGuire University of Illinois
Spelman College	(See Clark College, Atlanta, Georgia)	Wartburg College Waverly, Iowa	Leonard Goodstein State University of Iowa
Southeast Missouri State College Cape Girardeau, Missouri	Milton Rokeach Michigan State University	Waynesburg College Waynesburg, Pennsylvania	Walter Reitman Carnegie Institute of Tech- nology
Southwestern at Memphis Memphis, Tennessee	William R. Uttal International Business Ma- chines Research Center	Wesleyan College Macon, Georgia	Henry A. Imus United States Naval Medical Center
Southwest Missouri State College Springfield, Missouri	Bernard M. Bass Louisiana State University	Western College for Women Oxford, Ohio	Jerome Kagan Fels Research Institute
State Teachers College Valley City, North Dakota	Richard O. Peterson American Institute for Re- search	Western Illinois University Macomb, Illinois	Milton E. Rosenbaum State University of Iowa
Sterling College Sterling, Kansas	William A. Scott University of Colorado	Westmar College LeMars, Iowa	Jozef Cohen University of Illinois
Stillman College Tuscaloosa, Alabama	Jack Vernon Princeton University	Westminster College Fulton, Missouri	Lawrence M. Stolurow University of Illinois
Susquehanna University Selinsgrove, Pennsylvania	Norman Fredericksen Educational Testing Service	West Virginia Wesleyan College Buckhannon, West Virginia	Frank W. Finger University of Virginia
Talladega College Talladega, Alabama	Charles Hanley Hollins College	West Virginia State College Institute, West Virginia	Perry London University of Illinois
Tampa, University of Tampa, Florida	Filmore H. Sanford University of Texas	Whitman College Walla Walla, Washington	Launor F. Carter System Development Corpo- ration
Tennessee Wesleyan College Athens, Tennessee	John O. Crites University of Iowa	William Carey College Hattiesburg, Mississippi	Irwin A. Berg Louisiana State University
Texas Lutheran College Seguin, Texas	Wayne H. Holtzman Hogg Foundation	Wisconsin State College at Eau Claire Eau Claire, Wisconsin	Frank Auld, Jr. Wayne State University
Union College Barbourville, Kentucky	Gregory A. Kimble Duke University	Wisconsin State College River Falls, Wisconsin	R. B. Cattell University of Illinois
Union College Schenectady, New York	Donald S. Blough Brown University	Wisconsin State College Oshkosh, Wisconsin	Ivan D. Steiner University of Illinois



## Psychology in the News

### *Meredith Crawford Wins Army's Highest Civilian Award . . .*

Another psychologist received the Army's Distinguished Civilian Service Medal in August, when the Secretary of the Army made the presentation to Meredith P. Crawford, Director of the Human Resources Research Office (HumRRO) at George Washington University. Elvis J. Stahr, Jr., Secretary of the Army, in ceremonies in his office in the Pentagon, decorated Crawford on the tenth anniversary of the HumRRO organization. Crawford has been Director since HumRRO's inception.

The medal is awarded for "outstanding contributions to the United States Army"; the citation said:

Dr. Crawford has been responsible for the conduct of significant studies in the fields of training, motivation, leadership, and man-weapons system analysis, and has consistently made it possible for the Army to utilize the latest information available on the frontiers of psychological and educational knowledge. His professional attainments as a researcher and educator, his administrative ability, and his dedication to the objectives of the United States Army have combined to make Dr. Crawford's achievements during the past decade clearly exceptional, reflecting credit upon both the military service and the scientific community.

The Penatagon statement listed some of the achievements of HumRRO as:

Trainfire, an entirely new program in target detection and rifle marksmanship which is now in use at major training installations. It has replaced the known distance firing type of qualification.

Development of training guides for guided missile fire control operators

Development of techniques for training electronic and other specialists which take the student from the concrete to the abstract

Improved training methods for tank crews

Production of 25 leadership films now used throughout the Army for training officers and noncommissioned officers

Development of a land navigation course designed to assist the soldier to find his way on the modern battlefield

Procedures for use in evaluating helicopter maneuvers by student pilots

Readers of this journal would nominate others—and the first editor to read these lines insisted that the most fascinating program now at HumRRO is the speeded up language-teaching program. This is a program which enables a soldier very rapidly

to pick up basic skills for communication in a given country.

Crawford, currently a member of the Board of Directors and the Treasurer of APA, is a 1931 graduate of Vanderbilt University. He earned an MA (1932) and a PhD (1935) from Columbia University. He was a Research Assistant at Yale University and an Instructor in Psychology at Columbia, and then Dean of the College of Arts and Sciences at Vanderbilt prior to becoming Director of HumRRO. He served in the United States Army during World War II, rising to the rank of lieutenant colonel. He is a member of Phi Beta Kappa and of Sigma Xi.



—Carl Schneider

ELVIS J. STAHR, JR.      MEREDITH P. CRAWFORD      MRS. CRAWFORD  
Secretary of the Army

The Washington community of psychologists was told of the news about Crawford before he was—it was something of a surprise party. HumRRO is not the only place which can keep mum on secret information! But now that the word and the medal are out, perhaps here may be said a word many a reader would like personally to give: heartiest congratulations to Meredith Crawford and the good news he has made for psychology.

*From Genghiz to Herman . . .*

Noted here belatedly, but still worth reading are various statements of Erich Fromm and Sidney Hook, which ran in *The New Leader*. In an article called "The Couch and the Bomb" (*NL*, April 24) Hook criticized the Committee for a Sane Nu-

clear Policy, and specifically Fromm, for an advertisement written by Fromm about "paranoid versus sane thinking" on nuclear war and disarmament. Fromm replied to Hook, and Hook replied to the reply in *The New Leader* of May 29. Here is a sample from Hook:

Should we fear the danger of a nuclear holocaust? Of course we should. I have never believed that men could survive in a dangerous world without fear. But there is a profound difference between healthy, intelligent fear and hysterical fear. One difference with respect to the present issue is this: Intelligent fear is aware that not only is there a danger of a nuclear holocaust, *there is also as great a danger of a Communist takeover and destruction of free society*. . . . Intelligent fear . . . should impel us to use all the arts of creative intelligence to avoid the narrow alternative of surrender to Communism or nuclear war, to which the pacifist programs of Fromm and his friends tend to limit us.

Intelligent fear, as distinct from hysterical fear, does not equate the practical certainty that Communism will take over the world if the free nations disarm unilaterally with the far lower probability that nuclear war will break out by chance or Soviet design, and with the still lower probability that if nuclear war does break out, this must necessarily mean the end of all civilization.

And here is a sample from Fromm:

If neither the chance of nuclear war nor the degree of destruction is deniable, what is it that Hook calls hysterical in the warning of a nuclear holocaust?

I should hate to think that Hook shares the views of Kahn, who says in his book, *On Thermonuclear War*: "In other words, war is horrible. There is no question about it. But so is peace. And it is proper, with the kind of calculations we are making today, to compare the horror of war and the horror of peace and see how much worse it is." And explaining this statement to a newspaperman, Kahn said: "I meant that the quality of life after a thermonuclear attack would not be much different than before. And who the hell is happy and normal right now? We'd be just about the same after a war—and we'd still be economically useful" (*San Francisco Chronicle*, March 27, 1961).

If a concern with the horror of wholesale destruction of even the minimal figure of one-third of our own and of the Russian populations, plus hundreds of millions of neutrals (depending on which way the wind blows), is called hysterical, then I am afraid Hook calls hysterical that which in sober judgment should be called a normal and not yet dehumanized attitude: a respect for life and a horror of mass slaughter.

. . . . Hook must be aware that practically all visitors to the Soviet Union agree on one point: The people over there share one fear, that of war. He must be aware that Premier Khrushchev in his speeches (in contrast to the Chinese Communists) has again and again emphasized that nuclear war would be catastrophic for all concerned.

This fall Doubleday and Anchor Books will publish a new book by Fromm *Is Peace Still Possible: An Enquiry into the Facts and Fictions of Foreign Policy*. Wondering if peace is possible, or even if it will exist, at the time this item is printed—if it is printed—we think about H. G. Wells' remark that civilization has become a race between education and catastrophe. The race has gotten closer and closer from the time of the Great Khan, Genghis. The race is the same, but the hills of skulls are higher, in the imagination of our great Kahn, Herman.

*And Gladly Teach . . .*

When System Development Corporation and ONR planned an October conference on an interesting segment of the field of programmed learning, they thought quite a few persons would be interested in computer related programming. As this is written some five hundred persons are expected for the 3-day symposium. This department has up to now failed to mention that Robert E. Corrigan came through Washington and reaped reams of news space with demonstrations of a "teletest" system which provides for some interchange between television teacher, televised teachers, and students pressing response buttons. And in the line of psychological books selling beyond the margins of psychology, now in its third printing is Lumsdaine and Glaser's *Teaching Machines and Programmed Learning*. This book has been called "the Smyth Report" of a social science revolution. As we recall the Smyth Report, it was published just to give cold facts: "Here is a bomb—and a revolutionary force." After that, the fights really started.

This writer well remembers Smyth's surprise that his little venture in the history of technology should be selling at the rate of 10,000 a month in Moscow. Not quite so much, but still surprised, was Robert Glaser, the other day mentioning that *TM & PL* is now being translated into other languages, including Japanese.

*Smile More . . .*

The *Detroit News* recently carried this item in a column by Jane Schermerhorn, sent to this department by A. O. Kartinen:

### Post-Graduation Tough Times

The young June graduate collapsed in the chair at our desk.

He'd been job hunting and wanted us to know the four-year stint in college was a lark compared to the modern rigors of being hired.

One company seemed interested. Asked that he take physical, personality and aptitude tests, all of which he did.

Also a company representative called at his home. Like so many of today's graduates, the young man had married during his senior year and the company man was anxious to meet the wife.

She seemed to pass the test.

"Now" smiled Mr. Company man, making himself comfortable in the couple's living room. "What do you fight with your wife about?"

"We've only been married five months . . ." answered the surprised job hopeful. "We really don't fight."

The company man looked skeptical.

"When did you drink your last bottle of beer?"

It had been quite a while before graduation. One bottle with dinner one night.

"What was the reason your parents got a divorce?"

"Why, they're not divorced. They're really very happy and always have been."

There were more searching questions and at last the interviewer prepared to leave. His parting shot to the puzzled applicant was:

"You should smile more."

And that for some reason reminds us of one of the greatest lines we believe has been uttered since the new administration came into power in Washington. Playwright Arthur Miller was an honored guest in the inauguration stand itself at the Capital,

where on other occasions he had been given the treatment in committee hearings. Miller said: "I never thought I'd come back to Washington without my lawyer."

### Psigs of the Times

An NSF study of state agencies shows that scientists, engineers, and technicians make up about 10% of the total employment of the 50 state governments. It comes to 12,500 scientists, with 3,700 biological and 3,500 agricultural specialists. Next largest category are the 1,650 medical scientists and 1,300 psychologists, with chemists next at 1,200.

Ernest Dichter was the subject of an entertaining article in *Sports Illustrated* for July 24, 1961, and someone was quoted as calling him "the most prominent retailer of Freud going today." He has done several studies in the sports field, for glove manufacturers, people selling swimming pools, and boat manufacturers. He told the latter that male boat buyers were seeking outboard power "in almost a sexual way."

In August, *Reader's Digest* headlined an article on what your use of words indicates about you, "Your Words Give You Away," and mentioned John Dollard and O. Hobart Mowrer.

—MICHAEL AMRINE

## Psychology in the States

### Psycho-Congressional Abstracts

Washington is a funny place: big yet small, distant but close, rat-raceish and still placid. Anything can happen, and does. This afternoon we had the sudden pleasant duty of representing APA at the Pentagon ceremony where Meredith P. Crawford, member of the APA Board of Directors, was awarded the Distinguished Civilian Service Medal by the Secretary of the Army himself. On the way back we passed the caravan of Chen Cheng, who had just alighted to pay his respects at the Lincoln Memorial. In the lobby of APA, when we arrived, was a man waiting with a personal problem he hoped someone somewhere could help him solve.

There is something cosmopolitan here and something home town too. Or maybe this is how one needs to feel, the better to adjust to what might otherwise seem the mammothness of it all. For into the APA Central Office come what feel like, and probably are, tons of material from legions of sources. There is, to be sure, family mail: reports of boards and committees; newsletters of divisions and state associations; letters from dues-paying members; and inquiries (sometimes complaints) from students, jurists, priests, laymen, people with problems, and people with ideas. But there are, too, booklets, brochures, pamphlets, fliers, and x-class mail from government agencies, foundations, universities, professional associations, research groups, lay organizations, the mass media, courts, hospitals, schools, and whoever else has mail to mail.

We are right now smitten with this postal plenitude and the quintessence of Washington through the arrival of Cumulative Issue Number 4 of the *Digest of Public General Bills*. By our scale it weighs 2 pounds, 7 ounces concretely, while symbolically representing the efforts of the First Session of the eighty-seventh Congress to date. Leaving aside the joint resolutions, concurrent resolutions, and just plain resolutions, it abstracts for those interested (as do our own *Abstracts* for us) 1,961 bills introduced in the Senate thus far in 1961 (we leave the statisticians to figure the probability of the uncanny coincidence) and 7,332 in the House of Representatives.

The Capital is big and feverish and awesome. And in this labyrinthine bustle our own little place on Sixteenth and O could seem small and slow tempered and modest. It could, unless one might extract from all of this legislative largesse some factor which could, lo, be labeled "behavioral science dependence," or "psychology orientedness," or whatever less cumbersome tag would indicate that much of the legislators' legislation has import for the behavioral scientists' science.

It is not all that hard to find out, for with great minds traveling similar channels, the Library of Congress' *Digest* and APA's *Abstracts* have virtually identical formats. Simple, then, to search the topical index, both to marvel at the diversity of what is theirs and to look for what, in terms of expertise, may be ours.

The concerns of Congress are far-flung, indeed; few aspects of life fail to find expression in one or another bill. We cannot but blink at the range and contemporaneity of the issues. A joint resolution of the House designates the first day of July in each year as Tom Sawyer Day, U.S.A.; a House bill provides for the coinage of \$10 and \$5 gold pieces, permitting individuals within the United States to own not more than 10 of each; the John Birch Society comes in for its share of attention. So do Indian affairs, inland navigation, Mexican labor, fish and fisheries, lynching, shipment of tractors to Cuba, registration of foreign agents, increased ceilings for hospital beds, disease control, longshoremen's compensation, Alan B. Shepard, Jr., floor control, Arab-Israeli peace, food additives, and the gamut of other issues which brings the total to the aforementioned figures.

Pity the poor legislator on a session like this. Added to the usual vicissitudes of congressional life, a recent issue of *Harper's* tell us, is the bald statistical reality that of the 3,000 letters a week which come to the Senator from a big state, 25% are "inspired" or lobby mail, another 25% "fan" mail (blowing hot and cold), and the remaining 50% "case" mail, among which "there will be a scattering of letters from citizens expressing their own (rather than some lobbyist's) views on public issues." Small wonder that the article is titled "Don't Write Your Congressman, Unless . . ."



But no small wonder that the topical index of the *Digest of Public General Bills* contains clusters of topics psychologists know a fair amount about. As we scan the list, a lot of bills the legislators see as congruent with the national welfare happen to involve areas in which psychologists are, to say the least, at work. Mental health, aging, rehabilitation, exceptional children—it is almost as though we had foresightedly formed APA divisions around areas of public need. Juvenile delinquency, alcoholism, narcotics addiction, accident prevention—problems that read like a list of projects for which psychologists have obtained research funds. Bills on the administration and conduct of research interest the Congressmen; they do psychologists too. Several bills are concerned with the humane treatment of animals used experimentally—psychologists have a Code on Precautions in Animal Experimentation to show. 36 bills deal with the establishment of a National Peace Agency—the APA Committee on Psychology in National and International Affairs is at work on the problems of increasing understanding and reducing tension in the affairs of men. A House bill makes provision for training members of the Peace Corps—APA member Nicholas Hobbs has been busy as the corps' Director of Selection.

The foregoing is not meant as *apologia pro sua absentia* from Capitol Hill where, in contrast with some professional associations, APA has been less than conspicuous. It is meant rather to show that the bridge between that Hill and our Hull is neither long nor impassable. An APA Executive Officer twice-removed presented the legislators with testimony on mental health, the former Executive Officer offered testimony on the identification and motivation of talented youth, the present Executive Officer has furnished testimony in behalf of the United States Office of Education's Cooperative Research Program. Meanwhile, public spirited and psychologically knowledgeable psychologists contribute their services to the President's Science Advisory Committee; the research panels of fund granting agencies; and conferences of national, state, and local origin.

While the longer road lies yet ahead and psychology has much more to share than it has been sharing, the posture or stance (as they say in Washington) and the set (as they say in psychology) seem quite in line with the three-cornered wisdom of APA's Policy and Planning Board which, in its

1958 report to the Board of Directors and Council of Representatives, enjoined:

1. When agencies of the federal government ask for our advice, we should give it . . . . There is a public role to be played today by organized scientists; our association should do no less than its share. The American Psychological Association is the voice of psychology in this country and it should not be mute.

2. . . . A second requirement is that we be honest and consistent. We shall be judged as much by our actions as by our words. Accordingly, it is important that in the witness box we be as careful, as objective, as circumstantial as we are in our own laboratories. An appeal to emotion and prejudice, no matter how worthy the objectives, has no place in our armamentarium.

3. Finally, there is a difficult requirement that any person who speaks for the APA should be careful to reflect a reasonable consensus of the views of the members of the Association. On some matters, almost anyone can speak with simple assurance because we nearly all believe the same things. But in other areas, we are divided by doubts and differences, and these cannot be resolved by a majority vote; they must be frankly stated.

\* \* \*

**Neither the Lady nor Knowledge is for Burning.** If Fry will pardon us, we mean simply to say that what is known is meant to be shared. Happily, state associations seem increasingly to be of that persuasion. We note, for example, that the Connecticut State Psychological Society has apparently convinced others of its willingness so to do. In response to the request of the warden of the state prison, CSPS has appointed a representative to an Advisory Committee on Prerelease Training. For the Bureau of Vocational Rehabilitation the society has provided a committee to establish criteria for the selection of psychologists to render consultative and psychotherapeutic services. The Department of Education, at its request, has been furnished an advisory committee to select psychologists competent to carry out the program of testing retarded children, now mandatory for the establishment of special classes in schools throughout the state.

**Nor Is the World the Clinician's Oyster.** It gives us pause for thought that usually when we reach for examples they turn out to be of the applied sort. Again, happily, we are indebted to the same Connecticut State Psychological Society for an illustration that, if this is not the exception, neither is it the rule. At their recent program meeting, CSPS members heard little about Rorschach, much

about Russia. A symposium on psychology in other countries dealt with research on the kibbutz in Israel, the state of psychology in the British Commonwealth, and impressions of contemporary Japanese psychology.

Nor does the calendar of professional meetings contained in the *Newsletter* of the Rhode Island Psychological Association list only the APA convention and Mental Health Week. Equally prominent are the AAAS convention and the meeting of the American Institute of Biological Sciences, not to mention the Inter-American Conference on Rehabilitation held in Rio de Janeiro, the meeting of the Royal Medico-Psychological Association in Belfast, the Copenhagen International Congress of Applied Psychology.

**For Clinicians Have Consciences Too.** As if conveniently to prove our point, the two most far-flung (and probably largest) colonies of clinical psychologists reaffirm that psychology is bigger than the sum of its parts and the world bigger than psychology. The recent program meeting of the New York Society of Clinical Psychologists has the pristine purity of a Division 3 homecoming: "Phylogenetic Considerations in Mental Health," "Endocrine-Behavioral Interactions in the Reproductive Cycle," "Inherited Factors in Behavior," "Biological Changes in Capacity to Handle Life Situations."

No momentary concession to cosmopolitanism this, for the most recent issue of the NYSCP *Newsletter* invites the attention of the society members to a new group in process of organization—Psychologists for Peace, Inc.—"an action group in which psychologists and closely allied social scientists can bring together and make more available their specialized knowledge to further the cause of international understanding."

East being East, the West has its own version of the broader view. Writing in the official organ of the Los Angeles Society of Clinical Psychologists, President David Grossman throws open the pages of *LASCP News* to those of his flock who feel the lack of publication outlets for their research activities. In so doing, he delivers his own spiritual message:

Until recently, "research" was thought of only along "experimental," "objective," and "statistical" lines. Many of us who went into the service branch of Clinical Psychology were admonished that we had forsaken our primary function; namely, doing "research." It is now clear

that many forms of research are not only open to us, but desirable. I refer to such activities as formulating and communicating testable hypotheses, identifying critical problems, and using our knowledge and our clinical experience to create new techniques and theories. This is the "research attitude." It applies equally to research and clinical work, in the form of maintaining a self-searching orientation and a healthy skepticism about what we do. It is this attitude that is a cornerstone of our professional uniqueness. The crises which now face our society, and our profession, demand that we have the courage to explore new ideas and communicate our thinking publicly.

\* \* \*

**A Fable.** Maybe the long story of finding one's place in the sun is really best told in evolutionary terms, and even then allegorically, as does the Aesop of the Wisconsin Psychological Association who tells us, among other things, that once upon a time:

The donkey, known in terms of the family Equidae, and usually placed in the genus *Equus* . . . as he looked about him . . . could see nothing but genus *Equus* . . . This generated a great fear of the possible loss of his own identity . . . Even his voice began to reflect the monotony of his lament . . . No longer was he likely to be confused with the genus *Equus*, for in addition to his voice his ears had grown long from listening for invidious comparisons. In the fullness of time, as these things are measured, such unsolicited complaints grew until the poor genus *Equus*, almost to the horse, yearned for further differentiation on their part so that they might become more readily distinguished from the donkey.

The struggle became so unrewarding, we are told, that for a while it seemed a case of one-world-or-none. Yet, all things considered:

Fortunately about this time the donkey, to the great joy of genus *Equus*, achieved the fruits of his perseverance and richly earned the appellation of genus *Asinus* . . .

We leave each reader to interpret the fable in terms of his own needs. Morals of the story aside, we note meanwhile from a Reuters dispatch that, as far away as South Viet-Nam, all fortune tellers, soothsayers, and prophets must register by a certain date. No matter whose army may march into Saigon, the authorities are determined "to give status to those concerned and to eliminate rogues from this occupation."

And that, gentlemen, is fair enough.

—ELIOT H. RODNICK

*Chairman*

Board of Professional Affairs

ERASMUS L. HOCH

*Administrative Officer*

State and Professional Affairs

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## Notes and News

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**Charles Scott Berry**, of Santa Barbara, California, died on September 13, 1960.

**Harry W. Braun**, of Pittsburgh, Pennsylvania, died on July 27, 1961.

**Kenneth W. Colman**, of Philadelphia, Pennsylvania, died in 1961.

**Elmer A. K. Culler**, of the University of Rochester, died on June 30, 1961.

**Horace B. English**, of Ohio State University, died on July 20, 1961.

**Selinda McCaulley**, of Philadelphia, Pennsylvania, died in 1961.

**Marvin Adelson**, formerly with the Hughes Aircraft Corporation, has joined the System Development Corporation's Advanced Study Project.

**Gerard J. Bensberg, Jr.** has become a Project Director on the staff of the Southern Regional Education Board in Atlanta, Georgia.

**Donald A. Cook**, formerly at the National Institute of Mental Health, has become Director of Research and Development at Basic Systems, Inc., New York City.

**June R. Cornog**, formerly with the Campbell Soup Company, has become a Research Psychologist in the Information Application Section, Data Processing Division, National Bureau of Standards, United States Department of Commerce.

**Arthur H. Davison** has been appointed Professor of Psychology at Texas Technological College.

**Theodore I. Friedman**, formerly at Dixmont State Hospital, has been appointed Supervisor of Psychological Services in the Division of Preventive Medicine of the Louisiana State Board of Health in New Orleans, Louisiana.

**Eric F. Gardner** has been appointed Chairman of the Department of Psychology at Syracuse University.

**J. Wayne Gibson** has been appointed a Partner of Psychological Business Research, Cleveland, Ohio.

**James MacKinnon Gillespie** has been appointed Chairman of the Department of Education and Psychology at Colby College, succeeding **E. Parker Johnson** who has been appointed Dean of the Faculty.

**Victor Goertzel**, formerly with the Fountain House Foundation, has been appointed the first Research Psychologist at Camarillo State Hospital, California.

**Gerald A. Ehrenreich**; **William Seeman**, of the University of Kansas Medical Center; and **Richard B. Cravens**, of the Missouri Division of Mental Diseases have become training consultants to the Greater Kansas City Mental Health Foundation.

**James F. T. Bugental** and **Alvin A. Lasko** announce that **Thomas C. Greening** has joined them as a partner in Psychological Service Associates, Los Angeles, California.

**Bert T. King** has been appointed Chief of the Radio Section in the Survey Research Division of the United States Information Agency, Washington, D. C.

**Irwin Kremen** has been named Assistant Professor of Psychology at Michigan State University.

**Frieda B. Libaw** is Research Director for the Foundation for the Junior Blind, Los Angeles, California; she is also connected with the establishment of the Galton Institute, a corporation devoted to fostering research into the nature of creativity.

**Alfred Lit**, formerly with the Bendix Systems Division, has accepted an appointment as Professor in the Department of Psychology at Southern Illinois University.

**Vincent O'Connell** has resigned from the Columbus Psychiatric Clinic to take a position as Coordinator of Psychological Training at Columbus Psychiatric Institute and Hospital, Ohio.

**Walter Hudson Peterson** has joined the Lake Forest College faculty as an Assistant Professor of Psychology.

**Thomas F. A. Plaut**, of the Harvard School of Public Health, has been named Director of the Alcoholism Program in the Massachusetts Department of Public Health.

**Arthur H. Rogers** has been appointed a Counselor in the Counseling Center on the San Luis Obispo campus of California State Polytechnic College.

**William Ruzicka** has been appointed Chief Psychologist at the Nevada State Hospital, Missouri.

**David G. Ryans** has resigned the chairmanship of the Department of Educational Psychology at the University of Texas to join the System Development Corporation, Santa Monica, California. **William Cody Wilson** has been appointed an Assistant Professor in the department.

**Joel Shor** has been appointed Research Associate in the Tavistock Clinic in London and a faculty member for the training program of the British Association of Psychotherapists.

**Zanwil Sperber** has resigned from the Children's Hospital of Philadelphia to become Chief Psychologist in the Department of Child Psychiatry at Mount Sinai Hospital, Los Angeles, California.

**Thomas B. Sprecher** is now in the Western Electric Engineering Research Center, Princeton, New Jersey.

**June L. Tapp**, formerly at St. Lawrence University, has received the first appointment in the behavioral sciences at Harvey Mudd College as Visiting Assistant Professor of Psychology.

**J. D. Bailey**, **A. O. Sachs**, and **R. F. Sforza** have joined the staff of the United States Army Enlisted Evaluation Center in Washington, D. C.

In the Department of Psychology at the University of California, Los Angeles:

**Franklin Fearing**, Professor emeritus of the University of California, Los Angeles, will be Visiting Professor at the California Institute of Technology.

**Joseph G. Sheehan** will be on leave to be Visiting Professor on the Berkeley campus.

**Andrew L. Comrey** will spend his sabbatical year at the National Institute of Psychology in Rome, Italy.

**George F. J. Lehner** was a consultant to the Superior Civil Service of Pakistan during the summer on an International Cooperation Association appointment.

**Harold H. Kelley**, formerly at the University of Minnesota, has been appointed Professor, and **Ole Ivar Lovaas**, formerly at the University of Washington, has been appointed Assistant Professor.

Participants in the 1960-61 Hawaii State Hospital Distinguished Faculty Series, arranged by the Psychology Department in cooperation with the University of Hawaii, included **Gordon F. Derner**, **Leon Gorlow**, **Marshall R. Jones**, **Donald B. Lindsley**, **Ivan N. Mensh**, and **Edith M. Taylor**.

In the Department of Psychology at the University of Miami:

**Daniel B. Cruse**, formerly at the University of Arkansas, and **James T. Tedeschi**, formerly at Utah State University, have joined the staff.

**Raymond E. Hartley** has returned after a year at Stanford University on a postdoctoral fellowship.

**Benjamin H. Pubols, Jr.** will be on leave at the University of Wisconsin on a postdoctoral fellowship in neurophysiology from the National Institute of Neurological Diseases and Blindness.

**Harvey A. Wichman**, formerly at Bay City Junior College, has joined the faculty of the new Delta College.

**D. A. Worcester**, Professor emeritus of the University of Nebraska, has accepted an appointment as Visiting Professor at the University of Arizona.

The following roster of officers has been announced:

**San Fernando Valley Psychological Association**

President: Charles Ansell

Vice-President: Nora Weckler

Secretary-Treasurer: Rose Zeligs

The National Science Foundation announces that March 1, 1962 is the next closing date for receipt of proposals in the *Graduate Laboratory Development Program*. This program requires at least 50% participation by the institution with funds derived from nonfederal sources. Purpose of the grants is to aid institutions of higher education in modernizing, renovating, or expanding graduate-level basic research laboratories used by staff members and graduate students. Only those departments having an ongoing graduate training program leading to the doctoral degree in science at the time of proposal submission are eligible at



present. Proposals, as well as requests for additional information, should be addressed to: Office of Institutional Programs, National Science Foundation; Washington 25, D. C.

The *Social Science Institute* sponsors a program of training in community mental health research designed to prepare predoctoral students for research positions involving the application of social science theory and method to the mental health field. Particular course programs are developed for individual students by an interdisciplinary committee. Annual appointments carry a minimum stipend of \$2,400, plus tuition, and are available to students who have completed one year of graduate training in one of the social sciences. Applications for appointment in the academic year 1962-63 should be submitted by March 31, 1962. Applications and inquiries may be addressed to: Program Director, Community Mental Health Research Training Program; Social Science Institute, Washington University; Saint Louis 30, Missouri.

The United States Office of Education has awarded a grant to Wendell I. Smith, of Bucknell University, for a study of the "Motivational Aspects of Automated Instruction."

The United States Office of Vocational Rehabilitation has awarded a research grant to Seton Hall University for "An Experiment in the Use of Two Vocational Placement Techniques with a Population of Hard-to-Place Rehabilitation Clients."

The Department of Psychology at Wayne State University is establishing a library as a memorial to C. M. Louttit. It will contain a nucleus of major psychological journals and basic reference materials. At present, principal efforts are directed toward developing complete sets of psychological journals from 1940 to the present. *Anyone wishing to contribute materials to the C. M. Louttit Memorial Library* is encouraged to forward them to: Sheldon J. Lachman; Department of Psychology, Wayne State University; Detroit 1, Michigan. Name plates inscribed with the name of the donor will be fixed inside the front cover of each volume.

A list of postdoctoral training programs in clinical psychology (diagnosis, psychotherapy, research, or community mental health) is being compiled for distribution. For this purpose directors of ongoing postdoctoral programs in clinical psychology or of new

programs to be initiated within the next 2 years are requested to send a *brief description of their program* to: Bernard Lubin; Department of Psychiatry, Indiana University Medical Center; Indianapolis, Indiana.

On July 29-30, 1961 Milton H. Erickson conducted a 2-day seminar on the topics of pain, psychological mechanisms, psychosomatic medicine, and **hypnotherapy** for the Nevada Foundation for Behavioral Studies at the Southern Division (Las Vegas) of the University of Nevada.

Irving R. Stuart, of Hunter College, participated in a panel discussion on **Indecency in Literature and the Arts**, held at the one hundred and seventh Annual Meeting of the American Psychiatric Association.

E. L. Tolbert, of Madison College, participated in the National Defense Education Act **Guidance Institute** at the University of Nevada during the summer.

On August 13-19, 1961 a conference was held at the University of Rochester on problems of educational philosophy, goals, and content for developing graduate training programs in the various disciplines contributing to **research in vision**.

At the sixth International Congress of the World Federation for Mental Health, Stefan de Schill delivered a lecture "The Practice of Mental Health Groups" describing the **low cost treatment method of psychoanalysis** developed by the American Mental Health Foundation (151 Central Park West; New York 25, New York).

The eleventh **Annual Instrument Symposium** and the **Research Equipment Exhibit** will be held October 9-12 and October 10-13, 1961 at the National Institutes of Health. For information write to: James B. Davis; NIH, United States Public Health Service; Bethesda 14, Maryland.

A Conference on **Mathematical Models in the Social and Behavioral Sciences** will be held on November 2-5, 1961 under the auspices of the Western Management Science Institute of the University of California, Los Angeles. Conference participants will receive travel and maintenance expenses and an honorarium. Brief abstracts or proposals should be sent to: Fred Massarik and Philburn Ratoosh; Graduate School of Business Administration, University of California; Los Angeles 24, California.

At the Illinois State Psychiatric Institute in November 1961, Benjamin Pasamanick will deliver the **Percival Bailey Lecture** on "Some Misconceptions concerning Racial Differences in the Prevalence of Mental Disease."

The nineteenth Annual Meeting of the **American Psychosomatic Society** will be held in New York City on March 30–April 1, 1962. The Program Committee welcomes abstracts of original work to be presented at the meeting by either members or nonmembers of the society. Abstracts of not more than two typewritten pages, in 11 copies, should be submitted by December 1, 1961 to: Stewart Wolf; 265 Nassau Road; Roosevelt, New York.

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The twenty-sixth Annual Convention of the **Japanese Psychological Association** will be held in Nishinomiya, Hyogo, in July 1962. Chairman of the convention will be Megumi Imada, of the Department of Psychology at Kansei Gakuin University. Moriji Sagara, of the University of Tokyo, has been elected President of the association for 1961–63.

Margaret Lowenfeld, Director of Training at the Institute of Child Psychology in London and author of the Mosaic, World, Kaleidoblocs and Poleidoblocs Tests, has been lecturing in the United States on her techniques of diagnosis and treatment. For further information write to: Leah Gold Fein; 32 Urban Street; Stamford, Connecticut.

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## Convention Calendar

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**American Psychological Association:** August 30-September 5, 1962; St. Louis, Missouri

*For information write to:*

George S. Speer  
American Psychological Association  
1333 Sixteenth Street, N.W.  
Washington 6, D. C.

**Eastern Psychological Association:** April 27-28, 1962; Atlantic City, New Jersey

*For information write to:*

Marvin Iverson  
P. O. Box 601  
Garden City, New York  
Deadline for papers: December 1, 1961

**New England Psychological Association:** October 20-21, 1961; Waltham, Massachusetts

*For information write to:*

M. C. Langhorne  
Department of Psychology  
Trinity College  
Hartford 6, Connecticut

**Midwestern Psychological Association:** May 3-5, 1962; Chicago, Illinois

*For information write to:*

George R. Meyer, Secretary-Treasurer  
1314 Kinnear Road  
Columbus 12, Ohio

**Southeastern Psychological Association:** March 29-31, 1962; Louisville, Kentucky

*For information write to:*

Ray H. Bixler  
Department of Psychology  
University of Louisville  
Louisville 8, Kentucky

**National Society for Crippled Children and Adults:** November 17-21, 1961; Denver, Colorado

*For information write to:*

National Society for Crippled Children and Adults  
2023 West Ogden Avenue  
Chicago 12, Illinois

**Southern Society for Philosophy and Psychology:** April 19-21, 1962; Memphis, Tennessee

*For information write to:*

Dan R. Kenshalo  
Department of Psychology  
Florida State University  
Tallahassee, Florida

**American Association for the Advancement of Science:** December 26-31, 1961; Denver, Colorado

*For information write to:*

Raymond L. Taylor  
American Association for the Advancement of Science  
1515 Massachusetts Avenue, N.W.  
Washington 5, D. C.

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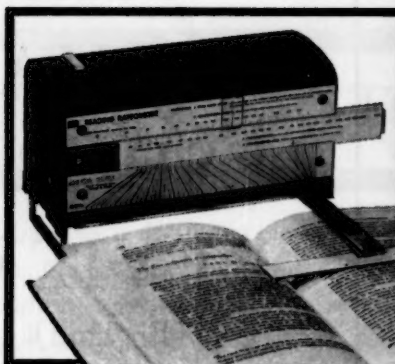
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